

Validate Print Help **Item Wise BoQ**

Order Inviting Authority: < INDIAN PORTS ASSOCIATION >
 Name of Work: < EXECUTION OF CIVIL AND INTERIOR WORKS AT IPA REST HOUSE >
 Contract No: < IPA/REST HOUSE/C&I WORKS/2024 >

Name of the Bidder/ Bidding Firm / Company :							
PRICE SCHEDULE							
NUMBER #	TEXT #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT With Taxes col (14) = sum (8) to (13) in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	7	14	15
1	Earth Work Items:						
1.01	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge. a) All kinds of soil	Item1	38.00	Cum		0.00	INR Zero Only
1.02	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Item2	22.00	Cum		0.00	INR Zero Only
1.03	Supplying chemical emulsion in sealed containers including delivery as specified. Chlorpyrifos/ Lindane emulsifiable concentrate of 20%	Item3	5.00	Litre		0.00	INR Zero Only
1.04	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) : Treatment of soil under existing floors using chemical emul sion @ 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. With Chlorpyrifos/Lindane E.C. 20% with 1% concentration	Item4	247.00	Sqm		0.00	INR Zero Only
2	Concrete Work Items:						
2.01	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	Item6	13.00	Cum		0.00	INR Zero Only
2.02	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone - III) : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	Item7	74.00	Sqm		0.00	INR Zero Only
3	RCC Work Items:						
3.01	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer-in-charge. (Note - Cement content considered in this item is @ 330 kg/ cum.Excess/less cement used as per design mix is payable/recoverable separately).						
3.0101	All works upto Plinth level	Item9	9.00	Cum		0.00	INR Zero Only
3.0102	All works above plinth level upto floor V level	Item10	16.00	Cum		0.00	INR Zero Only
3.02	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars	Item11	1253.00	Kg		0.00	INR Zero Only
3.03	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo-Mechanically Treated bars	Item12	1939.00	Kg		0.00	INR Zero Only
3.04	Centering and shuttering including strutting, propping etc. and removal of form for :						
3.0401	Foundations, footings, bases of columns, etc. for mass concrete	Item13	29.00	Sqm		0.00	INR Zero Only
3.0402	Shelves (Cast in situ)	Item14	26.00	Sqm		0.00	INR Zero Only

3.0403	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Item15	5.00	Sqm		0.00	INR Zero Only
3.0404	Column, Pillar, piers, Abutments, Posts and Struts	Item16	22.00	Sqm		0.00	INR Zero Only
3.0406	Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like	Item17	85.00	Sqm		0.00	INR Zero Only
3.05	Providing and Making 100mm CoreCuts or Holes by mechanical means in RCC Suspended Floor, Roofs, Landing, Balconies, Platforms or Beams	Item18	50.00	Nos		0.00	INR Zero Only
3.06	Providing and Making 100mm CoreCuts or Holes by mechanical means in Brick Work at any height	Item19	50.00	Nos		0.00	INR Zero Only
4	Brick Work Items:						
4.01	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	Item20	66.00	Cum		0.00	INR Zero Only
4.02	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 : Cement mortar 1:6 (1 cement : 6 coarse sand)	Item21	183.00	Cum		0.00	INR Zero Only
4.03	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in : a) Cement mortar 1:4 (1 cement : 4 coarse sand)	Item22	22.00	Sqm		0.00	INR Zero Only
4.04	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. Cement mortar 1:4 (1 cement :4 coarse sand)	Item23	763.00	Sqm		0.00	INR Zero Only
4.05	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.	Item24	785.00	Sqm		0.00	INR Zero Only
5	Marble Work Items:						
5.01	Providing and fixing 18 mm thick gang saw cut, mirror polished, remoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite Slab of Colour Black, Cherry/Rubby Red/ blue pearl (Selection as approved by site incharge/Architect)						
5.0101	Area of slab upto 0.50 sqm	Item25	20.00	Sqm		0.00	INR Zero Only
5.0102	Area of slab over 0.50 sqm	Item26	21.00	Sqm		0.00	INR Zero Only
5.02	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive, including cleaning etc. complete.	Item27	47.00	Metre		0.00	INR Zero Only
5.03	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	Item28	29.00	Each		0.00	INR Zero Only
5.04	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth. Granite Stone of approved shade	Item29	1.00	Sqm		0.00	INR Zero Only
6	Wood Work Items:						
6.01	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).	Item30	4.00	Cum		0.00	INR Zero Only
6.02	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part 1) non-decorative type, core of black 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	Item31	157.00	Sqm		0.00	INR Zero Only
6.03	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	Item32	157.00	Sqm		0.00	INR Zero Only
6.04	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 : 250x16 mm	Item33	9.00	Each		0.00	INR Zero Only
6.05	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 : 250x10 mm	Item34	15.00	Each		0.00	INR Zero Only

6.06	Providing and fixing Concealed hydraulic Door Closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 80 kg and door width upto 1200 mm) as approved by site engineer or Architect, with necessary accessories and screws etc. complete. make - Hafele or Equivalent.	Item35	69.00	Each		0.00	INR Zero Only
6.07	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 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	Item36	34.00	Each		0.00	INR Zero Only
6.08	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality. 1.0 mm thick.	Item37	313.00	Sqm		0.00	INR Zero Only
6.09	Providing 40x5 mm flat iron hold fast 400 mm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 300x100x150 mm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	Item38	552.00	each		0.00	INR Zero Only
6.10	Providing and fixing factory made white uPVC glazed/wire mesh windows/doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever required) extruded profiles having minimum wall thickness of 1.70 mm for Series R1 and R2 profiles and 2.10 mm for Series R3 and R4 profiles conforming to EN: 12608 in any shape, colour and design duly reinforced with galvanized mild steel section made of required shape & size as per CPWD Specification. uPVC extruded glazing beads, interlocks and inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8 mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367: Part 1 to 14, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame, sash & mullion (if required) shall be milled cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-Charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-Charge or Architect. make - Rehau/ Tenesta or equivalent. Wire mesh / Glazing of plain/ toughened/ laminated/ double glass unit with/ without high performance coatings as per design requirements and conforming to IS: 3546 & IS: 16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering Institute, to be provided by the manufacturer for						
6.1001	Using R3 series with frame (55 mm & above) x (45 mm & above) & mullion (55 mm & above) x (65 mm & above). (Height upto 2.5 metre	Item39	106.00	Sqm		0.00	INR Zero Only
6.1002	Casement cum fixed panel window having one single casement panel & one fixed panel with S.S 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles. Using R3 series with frame (55 mm & above) x (45 mm & above) & sash (55 mm & above) x (65 mm & above) & mullion (55 mm & above) x (65 mm & above). (Height upto 1.8 metre. each openable shutter upto 0.8m width)	Item40	11.00	Sqm		0.00	INR Zero Only
6.11	Providing and fixing bright finished brass 100 mm mortice Biometric latch and lock with card entry, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete. Make - Godrej or equivalent.	Item41	28.00	Each		0.00	INR Zero Only
6.12	Supply & installation of wall panelling made of Commercial Plyboard, melamine/veneer laminated finish, backlined with Sound tex/black acoustical fleece, tongue-groove edge for a seamless look, 5-test fire retardant grade/ Non FR, volume density of base board 800 - 830 Kg/m3, installed by using Aluminium framework system. The Panelling shall be finished as per the drawings and to the satisfaction of the Engineer in Charge or architect. All the support system shall be as per the Approved by engineer or architect.	Item42	50.00	Sqm		0.00	INR Zero Only
6.13	Supply & installation of wall panelling made of Commercial Plyboard, 1mm laminated finish of approved color and shade, backlined with Sound tex/black acoustical fleece, tongue-groove edge for a seamless look, 5-test fire retardant grade/ Non FR, volume density of base board 800 - 830 Kg/m3, installed by using Aluminium framework system. The Panelling shall be finished as per the drawings and to the satisfaction of the Engineer in Charge or architect. All the support system shall be as per the Approved by engineer or architect.	Item43	50.00	Sqm		0.00	INR Zero Only
7	Flooring Work Items:						

7.01	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm	Item44	198.00	Sqm		0.00	INR Zero Only
7.02	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, dado, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete. Size of Tile 600x600 mm	Item45	619.00	Sqm		0.00	INR Zero Only
7.03	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. Polished Granite stone slab colour of Black, Cherry/Ruby Red or equivalent	Item46	51.00	Sqm		0.00	INR Zero Only
7.04	Providing and fixing 18 mm thick polished granite stone in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete.	Item47	14.00	Sqm		0.00	INR Zero Only
7.05	Extra for pre finished nosing to treads of steps of marble stone	Item48	93.00	metre		0.00	INR Zero Only
7.06	Extra for marble stone flooring in treads of steps and risers using single length up to 2.00 metre	Item49	33.00	Sqm		0.00	INR Zero Only
7.07	Providing and laying machine cut, mirror polished, Italian Marble stone flooring laid in required pattern in linear portion of the building all complete as per architectural drawings, with 18 mm thick stone slab laid over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with white cement slurry @ 4.4 kg/sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge 18 mm thick Italian Marble stone slab, Lite Grey Emperor, Brown Emperor, Crema Marfil, Lite grey Italian, etc	Item50	984.00	Sqm		0.00	INR Zero Only
7.08	Providing and fixing machine cut, mirror/ eggshell polished, Marble stone work for wall lining (vener work) including dado, skirting, risers of steps etc., in required design and pattern (if required with marble stone slab pieces of different shapes, sizes & texture but of even thickness) on 12 mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) laid and jointed with white cement slurry @ 3.3 kg/sqm including pointing with white cement slurry admixed with pigment of matching shade, including rubbing, curing, polishing etc. all complete as per Architectural drawings, and as directed by the Engineer-in-Charge. 18 mm thick Italian Marble stone slab, Lite Grey Emperor, Brown Emperor, Crema Marfil, Lite grey Italian, etc	Item51	99.00	Sqm		0.00	INR Zero Only
7.09	38 mm thick wood block flooring of first class teak wood laid over 25 mm thick leveling layer of cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 10 mm nominal size) to be paid separately, coated with a thin layer of hot bitumen penetration 80/25 (blown type) @ 2.45 kg per sqm, including fixing blocks in position after dipping in hot bitumen (blown type) up to half depth, planed, levelled smooth and finished complete.	Item52	69.00	Sqm		0.00	INR Zero Only
7.10	Providing and laying Exterior Grade floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of make - Johnson/Nitco / Kajaria, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete. (Basic Rate of Tile Rs 150/- per sqft)	Item53	96.00	Sqm		0.00	INR Zero Only
8	Roofing Work Items:						
8.01	Providing 10 mm thick plaster of Paris (gypsum anhydrous) ceiling up to a height of 5 m above floor level, over first class nail wood strips 25x6 mm with 10 mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame (frame work to be paid separately). Flat surfaces	Item54	1250.00	sqm		0.00	INR Zero Only
8.02	Extra for sunk or raised mouldings in the plaster of Paris (Gypsum anhydrous) ceiling	Item55	125.00	sqm		0.00	INR Zero Only
9	Finishing Work Items:						
9.01	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	Item56	2833.00	Sqm		0.00	INR Zero Only

9.02	6 mm cement plaster of mix : Two or more coats on new work	Item57	1250.00	Sqm		0.00	INR Zero Only
9.03	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 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	Item58	1276.00	Sqm		0.00	INR Zero Only
9.04	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Item59	2833.00	Sqm		0.00	INR Zero Only
9.05	Finishing walls with textured exterior paint of required shade : New work (Apex top Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20ltr/10 sqm.	Item60	1276.00	Sqm		0.00	INR Zero Only
9.06	Providing and painting two or more coat of Valvet touch paint of approved shade and colour over one coat of primer with all cost of materials and labour.	Item61	4083.00	Sqm		0.00	INR Zero Only
10	Repair and Dismantling Work Items:						
10.01	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	Item62	117.00	Sqm		0.00	INR Zero Only
10.02	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. Nominal concrete 1:3:6 or richer mix (including equivalent design mix)	Item63	30.00	Cum		0.00	INR Zero Only
10.03	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	Item64	147.00	Sqm		0.00	INR Zero Only
10.04	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	Item65	487.00	Sqm		0.00	INR Zero Only
10.05	Providing and fixing 10x10x7.50 cm Granite stone block hand cut and chisel dressed on top, for paving in floors, drains etc. laid over 20 mm thick base mortar 1:4 (1 cement : 4 coarse sand) with joints 10 mm wide filled with same mortar including ruled pointing etc. complete as per direction of engineer-in-charge.	Item66	487.00	Sqm		0.00	INR Zero Only
10.06	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge. With cement mortar 1:4 (1cement: 4 coarse sand)	Item67	356.00	Sqm		0.00	INR Zero Only
11	Aluminium Work Items:						
11.01	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). With float glass panes of 8 mm thickness (weight not less than 20 kgs/sqm)	Item68	109.00	Sqm		0.00	INR Zero Only
11.02	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5mm depth and 5 mm width	Item69	362.00	metre		0.00	INR Zero Only
11.03	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing : Oval shape 450x350 mm (outer dimensions)	Item70	27.00	Each		0.00	INR Zero Only
11.04	Providing and fixing 12mm thick frameless toughened glass door shutter of approved brand and manufacture, including SS profile fittings providing and fixing Door handle, lock and stopper, top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer in charge. fittings Make - Hetch/ Hefele or as approved by Architect.	Item71	15.00	Sqm		0.00	INR Zero Only
11.05	Providing and fixing 12mm toughened frameless fixed glass with patch fittings and/or in grooves in plaster / stone / masonry / wood members with aluminum channels of appropriate sizes including all necessary hardware, filling silicon sealant etc. all complete.	Item72	106.00	Sqm		0.00	INR Zero Only
11.06	Providing and fixing 12mm thick toughened frameless glass door with patch fittings as desired including receiving & fixing all patch fittings, necessary hardware etc complete.	Item73	20.00	Each		0.00	INR Zero Only
11.07	Supply & installation of High Pressure laminate (HPL)on wall/ Facade over Aluminium Framing of 40x40 hollow pipes, HPL Panel color and shade as approved by Engineer or Architect. The Paneling shall be fixed as per the drawings all complete.	Item74	50.00	Sqm		0.00	INR Zero Only
12	Waterproofing Work Items:						

12.01	Providing and laying PU-based waterproofing treatment, including surface preparation, for toilets, roofs, balconies, terraces, etc., as instructed by the brand manufacturer. The process encompasses surface preparation, primer coat if required by the manufacturer, water ponding for 2-3 days for testing, and protection plaster of 50mm thick after successful treatment. All complete as per brand manufacturer and Engineer Incharge. Approved Brand Compound - Dr. Fixit Flexi PU 270 or Nitoproof 600PF							
12.0101	Same as above but for toilet	Item75	177.00	Sqm			0.00	INR Zero Only
12.0102	Same as above but for Roof	Item76	278.00	Sqm			0.00	INR Zero Only
13	Steel Work Items:							
13.01	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. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	Item77	2340.00	Kgs			0.00	INR Zero Only
13.02	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer. M.S. tube	Item78	623.00	Kgs			0.00	INR Zero Only
14	Internal & External Plumbing Work Items:							
14.01	All the CP and sanitary fitting make should Kohler or Grohe as approved by Architect.							
14.0101	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 upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.							
14.0102	All Kind of soil	Item79	36.40	Cum			0.00	INR Zero Only
14.02	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :							
14.0201	All kinds of soil							
14.0202	Pipes, cables etc. exceeding 80 mm dia. But not exceeding 300 mm dia	Item80	200.00	Metre			0.00	INR Zero Only
14.03	Providing and fixing 75 mm high, 50 mm deep and 18 mm thick stone slab table rubbed, edges rounded and polished, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.							
14.0301	Granite Stone of approved shade	Item81	1.00	Sqm			0.00	INR Zero Only
14.04	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.							
14.0401	110 mm diameter	Item82	45.00	Metre			0.00	INR Zero Only
14.05	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.							
14.0501	Single pushfit Coupler							
14.0502	110 mm	Item83	4.00	Each			0.00	INR Zero Only
14.0503	Single tee with door							
14.0504	110x110x110 mm	Item84	4.00	Each			0.00	INR Zero Only
14.0505	Bend 87.5°							
14.0506	110 mm bend	Item85	4.00	Each			0.00	INR Zero Only
14.0507	Shoe (Plain)							
14.0508	110 mm Shoe	Item86	4.00	Each			0.00	INR Zero Only
14.06	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.							
14.0601	110 mm	Item87	15.00	Each			0.00	INR Zero Only
14.07	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	Item88	4.00	Each			0.00	INR Zero Only
14.08	12 mm cement plaster finished with a floating coat of neat cement of mix :							
14.0801	1:3 (1 cement: 3 fine sand)	Item89	29.80	Sqm			0.00	INR Zero Only

14.09	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, 40 mm 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 :					
14.0901	W.C. pan with ISI marked white solid plastic seat and lid	Item90	1.00	Each		0.00 INR Zero Only
14.10	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.					
14.1001	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	Item91	4.00	Each		0.00 INR Zero Only
14.11	Providing and fixing wash basin with C.I. brackets, 15 mm dia CP Brass single hole basin mixer of approved quality and make, including painting of fittings and brackets, cutting and making good the walls wherever required:					
14.1101	(a) White Vitreous China Wash basin size 550x400 mm with a 15 mm CP Brass single hole basin mixer	Item92	24.00	Each		0.00 INR Zero Only
14.12	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 with drain board					
14.1201	510x1040 mm bowl depth 200 mm	Item93	1.00	Each		0.00 INR Zero Only
14.13	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge	Item94	28.00	Each		0.00 INR Zero Only
14.14	Providing and fixing CP Brass Single lever telephonic wall mixer of quality & make as approved by Engineer in charge.					
14.1401	(a) 15 mm nominal dia	Item95	24.00	Each		0.00 INR Zero Only
14.15	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible pipe					
14.1501	40 mm dia	Item96	1.00	Each		0.00 INR Zero Only
14.16	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	Item97	28.00	Each		0.00 INR Zero Only
14.17	Providing and fixing toilet paper holder :					
14.1701	C.P. brass	Item98	26.00	Each		0.00 INR Zero Only
14.18	Providing and fixing M.S. holder bat clamp of approved design to sand cast iron/ cast iron (spun) pipes comprising of M.S. flat brackets made of 50x5 mm flat of specified shape, projecting 75 mm outside the wall surface and fixed on wall with 4nos, 6mm dia expansion hold fasteners, including drilling necessary holes in brick wall/ CC/ RCC surface and the cost of bolts etc. The pipes shall be fixed to the already fixed brackets with the help of 30 mm x1.6 mm galvanised M.S. flats of specified shape and of total length 420 mm and shall be fixed with M.S. nuts, bolts, & washers of size 25x6 mm, one bolts on each side of the pipe.					
14.1801	Total bracket length 1040 mm of approved shape and design (for three 100 mm dia pipes)	Item99	90.00	Each		0.00 INR Zero Only
14.19	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.	Item100	26.00	Each		0.00 INR Zero Only
14.20	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge.	Item101	1.00	Each		0.00 INR Zero Only
14.21	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall					
14.2101	15 mm nominal dia Pipes	Item102	37.00	metre		0.00 INR Zero Only
14.2102	20 mm nominal dia Pipes	Item103	47.00	metre		0.00 INR Zero Only
14.2103	25 mm nominal dia Pipes	Item104	58.00	metre		0.00 INR Zero Only
14.2104	32 mm nominal dia Pipes	Item105	105.00	metre		0.00 INR Zero Only
14.2105	40 mm nominal dia Pipes	Item106	169.00	metre		0.00 INR Zero Only
14.2106	50 mm nominal dia Pipes	Item107	95.00	metre		0.00 INR Zero Only

14.22	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes joining of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.						
14.2201	15 mm nominal dia Pipes	Item108	386.00	metre		0.00	INR Zero Only
14.2202	20 mm nominal dia Pipes	Item109	251.00	metre		0.00	INR Zero Only
14.2203	25 mm nominal dia Pipes	Item110	50.00	metre		0.00	INR Zero Only
14.2204	32 mm nominal dia Pipes	Item111	4.00	metre		0.00	INR Zero Only
14.23	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work						
14.2301	40 mm dia nominal bore	Item112	40.00	Metre		0.00	INR Zero Only
14.24	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 :						
14.2401	25 to 40 mm nominal bore	Item113	1.00	Each		0.00	INR Zero Only
14.25	Providing and fixing uplasticsed PVC connection pipe with brass unions						
14.2501	45 cm length						
14.2502	15 mm nominal bore	Item114	107.00	Each		0.00	INR Zero Only
14.26	Constructing masonry chamber 90x90x100cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. Surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 (1 cement:2 coarse sand:4 graded stone aggregate 20mm nominal size) necessary excavation foundation concrete 1.5:10 (1 cement:5 fine sand: 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick finished with a floating coat of neat cement complete as per standard design with F.P.S. bricks.						
14.2601	with common burnt clay F.P.S. (non module) brick of class designation 7.5	Item115	1.00	Each		0.00	INR Zero Only
14.27	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :						
14.2701	40 mm diameter pipe	Item116	40.00	Metre		0.00	INR Zero Only
14.28	Providing and filling sand of grading zone V or coarser grade, allround the G.I. pipes in external work :						
14.2801	40 mm dia nominal bore	Item117	40.00	Metre		0.00	INR Zero Only
14.29	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.	Item118	20000.00	per litre		0.00	INR Zero Only
14.30	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.						
14.3001	15mm nominal bore	Item119	2.00	Each		0.00	INR Zero Only
14.31	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931						
14.3101	15mm nominal bore	Item120	27.00	Each		0.00	INR Zero Only
14.32	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.						
14.3201	40 mm nominal bore, 206mm long, weighing not less than 690 gms	Item121	1.00	Each		0.00	INR Zero Only
14.33	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	Item122	59.00	Each		0.00	INR Zero Only
14.34	Providing and laying cement concrete 1.5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design :						
14.3401	200 mm diameter S.W. pipe	Item123	80.00	Metre		0.00	INR Zero Only
14.3402	250 mm diameter S.W. pipe	Item124	120.00	Metre		0.00	INR Zero Only
14.3403	300 mm diameter S.W. pipe	Item125	10.00	Metre		0.00	INR Zero Only
14.35	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.						
14.3501	150 x 100 mm size P type						
14.3502	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Item126	12.00	Each		0.00	INR Zero Only
14.36	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 :						
14.3601	250 mm dia. R.C.C. pipe	Item127	120.00	Metre		0.00	INR Zero Only
14.3602	300 mm dia. R.C.C. pipe	Item128	10.00	Metre		0.00	INR Zero Only

14.37	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :						
14.3701	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) :						
14.3702	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Item129	10.00	Each		0.00	INR Zero Only
14.38	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet :						
14.3801	150 mm diameter	Item130	24.00	Each		0.00	INR Zero Only
14.39	Extra for depth for manholes						
14.3901	Size 90x90 cm						
14.3902	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Item131	3.00	Metre		0.00	INR Zero Only
14.40	Constructing Brick Masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top with FPS bricks class designation 75 in cement mortar 1:4 (1 cement : 4 Coarse sand), inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size) and making necessary channel in Cement Concrete 1:2:4 (1 Cement : 2 Coarse Sand : 4 Graded Stone Aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.						
14.4001	0.91m deep with SFRC cover and frame (heavy duty HD-20 grade designation) 560mm internal diameter conforming to I.S.12592, total weight of cover and frame to be not less than 182kg, fixed in cement concrete 1:2:4 mix (1cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including centering, shuttering all complete.(Excavation foot rests and 12mm thick cement plaster at the external surface shall be paid for separately)						
14.4002	with common burnt clay F.P.S.(non module) brick of class designation 7.5	Item132	2.00	Each		0.00	INR Zero Only
14.41	Extra depth for circular type manholes 0.91 m internal dia (at bottom) beyond 0.91m to 1.67 m .						
14.4101	with common burnt clay F.P.S.(non module) brick of class designation 7.5	Item133	0.50	Meter		0.00	INR Zero Only
14.42	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS: 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacturer's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	Item134	65.00	Each		0.00	INR Zero Only
14.43	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 :						
14.4301	For pipes 100 to 250 mm diameter	Item135	2.00	Each		0.00	INR Zero Only
14.44	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) with precast R.C.C. vertical grating complete as per standard design :						
14.4401	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Item136	12.00	Each		0.00	INR Zero Only
14.45	Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 rating with bronze/gunmetal seat duty ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required :						
14.4501	50 mm dia	Item137	8.00	Each		0.00	INR Zero Only
14.4502	40 mm dia	Item138	3.00	Each		0.00	INR Zero Only
14.46	Providing and fixing CP Brass liquid soap container of standard shape with bracket of the same materials with snap fittings of approved quality and colour.	Item139	29.00	Each		0.00	INR Zero Only
14.47	Providing and fixing CP Brass towel ring with concealed fittings arrangement of approved quality and colour.	Item140	29.00	Each		0.00	INR Zero Only

14.48	Providing and fixing CP Brass Coat Hook of approved quality and colour.	Item141	27.00	Each		0.00	INR Zero Only
14.49	Providing ,Fixing of straight/ offset type flexible single body push fit type WC pan connector of with integral single mould sealing flims made of flexible EVA body to be fixed with manufacture supplied grease, including rubber bush / adaptor for use with PP pipe as supplied with the pan connector.	Item142	27.00	Each		0.00	INR Zero Only
14.50	Providing and fixing C.P. brass Two way bib cock of approved quality conforming to IS-8931.	Item143	27.00	Each		0.00	INR Zero Only
14.51	Providing and fixing CP Health faucet to european type W.C. of approved quality and make as approved by engineer in charge.	Item144	27.00	Each		0.00	INR Zero Only
14.52	Providing and fixing CP Brass Single lever mixer for sink of quality & make as approved by Engineer in charge. (a) 15 mm nominal dia.	Item145	1.00	Each		0.00	INR Zero Only
14.53	Providing and fixing CP Brass towel rail complete with brackets with CP brass screws with concealed fittings arrangement of approved quality and colour.	Item146	25.00	Each		0.00	INR Zero Only
14.54	Providing and fixing CP Brass soap Dish Holder with concealed fitting arrangements, of approved quality and colour	Item147	25.00	Each		0.00	INR Zero Only
14.55	Providing and fixing CP Brass Shower arm complete with screws with concealed fittings arrangement of approved quality and colour.	Item148	24.00	Each		0.00	INR Zero Only
14.56	Providing and fixing Bath Tub with bath spout complete as per manufacture's specifications and direction of Engineer-In-Charge.	Item149	4.00	Each		0.00	INR Zero Only
14.57	Providing and fixing Forged Brass Ball Valve (Screwed), with setting and gland of superior quality having minimum working pressure of 10 kg/cm ² .						
14.5701	15 mm dia	Item150	25.00	Each		0.00	INR Zero Only
14.5702	20 mm dia	Item151	45.00	Each		0.00	INR Zero Only
14.5703	25 mm dia	Item152	16.00	Each		0.00	INR Zero Only
14.5704	32 mm dia	Item153	8.00	Each		0.00	INR Zero Only
14.5705	40 mm dia	Item154	9.00	Each		0.00	INR Zero Only
14.58	Providing & fixing Auto Air vent for cold water supply risers, suitable for pressure not less than 15 Kg/Sq.cm.						
14.5801	15 mm dia	Item155	2.00	Each		0.00	INR Zero Only
14.59	Providing, fixing & testing uPVC SWR pipes conforming to IS 13592 (Type B) alongwith all required fittings like tees, bends, crosses with or without access doors jointed with approved solvent cement as per manufacture's recommendations, fixed to walls and ceilings with clamps complete including cutting and making good the floors and walls where required complete of outer						
14.5901	110mm dia	Item156	540.00	Metre		0.00	INR Zero Only
14.60	Providing, fixing, jointing and testing in position the following uPVC pipes conforming to IS 4985 of 6 kg/sqcm pressure rating including all fittings, solvent weld joints, testing complete for drainage system cut to required length to be laid under floor including covering all around with cement concrete and making good the same complete as required.						
14.6001	63mm dia	Item157	76.00	Metre		0.00	INR Zero Only
14.6002	50mm dia	Item158	6.00	Metre		0.00	INR Zero Only
14.6003	40mm dia	Item159	74.00	Metre		0.00	INR Zero Only
14.6101	Providing and Fixing 110x110 mm uPVC 'P' trap with Height riser/Saddle as required size fitting with seal 50 mm of self cleansing design floor/urinal trap without vent suspended with supporting clamp or in sunken portion including cutting and making good the walls and floors wherever required complete in all respects.						
14.6102	110 mm inlet & 110 mm outlet Long ht	Item160	32.00	Each		0.00	INR Zero Only
14.62	Providing and Fixing height riser drain of following size inlet and outlet including cutting and making good the walls and floors wherever required complete in all respects.	Item161	32.00	Each		0.00	INR Zero Only
14.63	Providing and Fixing uPVC floor drain of following size inlet and outlet including cutting and making good the walls and floors wherever required complete in all respects. 110 x63 mm outlet	Item162	27.00	Each		0.00	INR Zero Only
14.64	Providing & fixing uPVC clean out plug with suitable insert keys for opening in; brass cap, male threaded joint with threaded uPVC socket fixed to uPVC pipe joints as required complete in all respects.						
14.6401	110mm dia	Item163	6.00	Each		0.00	INR Zero Only
14.65	Providing and fixing rectangular shape Stainless steel grating with frame for floor traps or drains of required pattern including cutting and making good the floors complete.	Item164	59.00	Each		0.00	INR Zero Only
14.66	Supplying and laying of following size DWC SN8 pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 16098, Part II complete with fitting and cutting, jointing etc. direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.						
14.6601	200mm dia	Item165	80.00	Metre		0.00	INR Zero Only

14.67	Construction of brick masonry Grease Trap of Effective depth for Kitchen drainage with precast concrete block in cement mortar 1:4 (1 cement : 4 coarse sand) , foundation concrete 1:4:8 m3 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size), inside and outside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement inside and rough plaster on outside, including fixing of grating , neatly finished with 1 nos manhole cover complete in all respects including necessary excavation, refilling and disposal of surplus earth, complete as per attached Sketch .					
14.6701	Grease Trap 2000x1000x1000 MM	Item166	1.00	Each		0.00 INR Zero Only
14.68	Construction of modular type rain water harvesting pit 12 cum. (For Storage purpose) including following items.					
14.6801	Earth work excavation with JCB/excavators in all types of soil/Ordinary rock/Hard rock and with a lift up to 5 meter.					
14.6802	Material for base work (gravel/ston chips and double washed river sand)					
14.6803	Dressing					
14.6804	Compaction - of base soil					
14.6805	Soil disposal - disposal of extracted soil from the site to inside the boundary walls of the building up to a maximum distance of 0.5km					
14.6806	Geo textile - to avoid invasion of soil provide stability to the tank and improve quality of water within the tank with tensile strength.					
14.6807	Modular RWH modules material					
14.6808	Backfilling of the area constructed in and around after compacting them properly.					
14.6809	Desilting chamber					
14.6810	FRP Micro filter capable of removing solids.					
14.6811	Riser for filter extension.	Item167	1.00	Each		0.00 INR Zero Only
15	Firefighting Work Items:					
15.01	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	Item168	15.00	Metre		0.00 INR Zero Only
15.02	Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.					
15.0201	150mm width x 50mm depth x 1.6 mm thickness.	Item169	15.00	Metre		0.00 INR Zero Only
15.03	Providing and fixing in position the industrial type pressure gauges with gun metal / brass valves complete as required	Item170	4.00	Each		0.00 INR Zero Only
15.04	(A) Supplying, installation, testing and commissioning of electric driven terrace pump with Electrical Panel suitable for automatic operation and consisting of following, complete in all respects, as required: (Terrace Pump)					
15.0401	(B) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical confirming to IS : 1520					
15.0402	(C) Suitable HP squirrel cage induction motor TEFC type suitable for operation on 415 volts, 3 phase, 50 Hz, AC supply with IP55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325.					
15.0403	(D) M.S fabricated common base plate, coupling, coupling guard, foundation bolts etc.as required.					
15.0404	(E) Suitable cement concrete foundation duly plastered and with anti vibration pads.					
15.0405	900 lpm at 35 m Head	Item171	2.00	Set		0.00 INR Zero Only
15.05	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required :					
15.0501	100 mm dia.	Item172	36.00	Metre		0.00 INR Zero Only
15.0502	80 mm dia.	Item173	12.00	Metre		0.00 INR Zero Only
15.0503	65 mm dia.	Item174	13.00	Metre		0.00 INR Zero Only
15.0504	50 mm dia.	Item175	17.00	Metre		0.00 INR Zero Only
15.0505	40 mm dia.	Item176	17.00	Metre		0.00 INR Zero Only
15.0506	32 mm dia.	Item177	13.00	Metre		0.00 INR Zero Only
15.0507	25 mm dia.	Item178	66.00	Metre		0.00 INR Zero Only
15.06	Supplying and fixing single headed internal hydrant valve with instantaneous Gunmetal/Stainless Steel coupling of 63 mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type -A) with blank Gunmetal/Stainless Steel cap and chain as required :	Item179	1.00	Set		0.00 INR Zero Only
15.0601	Single headed Stainless steel					
15.07	Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required :					
15.0701	100mm dia.	Item180	2.00	Set		0.00 INR Zero Only
15.0702	80mm dia.	Item181	5.00	Set		0.00 INR Zero Only
15.0703	50mm dia.	Item182	1.00	Set		0.00 INR Zero Only
15.08	Providing, installation, testing and commissioning of non-return valve of following sizes conforming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required :					

15.0801	100 mm dia.	Item183	2.00	Each		0.00	INR Zero Only
15.0802	80 mm dia.	Item184	2.00	Each		0.00	INR Zero Only
15.09	Providing, installation, testing and commissioning of stainless steel Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange.						
15.0901	80 mm dia.	Item185	2.00	Each		0.00	INR Zero Only
15.10	Supplying and fixing 63 mm dia, 15 m long RRL hose pipe with 63 mm dia male and female couplings duly bound with GI wire, rivets etc. conforming to IS 636 (type-A) as required.	Item186	2.00	Each		0.00	INR Zero Only
15.1001	Stainless Steel (Grade 304)						
15.11	Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required.	Item187	6.00	Each		0.00	INR Zero Only
15.1101	20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585						
15.1102	20 mm nominal internal dia gun metal globe valve & nozzle.						
15.1103	Drum and brackets for fixing the equipments on wall.						
15.1104	Connections from riser with 25 mm dia stop gun metal valve & M.S. pipe and socket.						
15.1105	30 m						
15.12	Supplying & fixing 63 mm dia gun metal short branch pipe with 20 mm nominal internal diameter size nozzle conforming to IS 903 suitable for instantaneous connection to interconnect hose pipe coupling as required.	Item188	1.00	Each		0.00	INR Zero Only
15.1201	Stainless Steel (Grade 304)						
15.13	Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required.						
15.1301	2 way - 100 mm dia M.S. Pipe	Item189	1.00	Each		0.00	INR Zero Only
15.14	Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating 68 degree centigrade with required accessories.						
15.1401	Pendent Sprinkler	Item190	12.00	Each		0.00	INR Zero Only
15.1402	Upright Sprinkler	Item191	12.00	Each		0.00	INR Zero Only
15.1403	Horizontal side wall sprinkler	Item192	4.00	Each		0.00	INR Zero Only
15.15	Providing & fixing of pressure switch in M.S. pipe line including connection etc. as required.	Item193	2.00	Each		0.00	INR Zero Only
15.16	Providing & fixing flow switch in following sizes M.S. pipe including connection etc as required.						
15.1601	100mm dia	Item194	1.00	Each		0.00	INR Zero Only
15.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end).						
15.1701	25 mm nominal bore	Item195	7.00	Each		0.00	INR Zero Only
15.18	Providing and fixing angle iron (40mmx40mmx5mm) door frame and MS sheet (6mm thick) cum glass shutter of size 2.1mtrx0.9mtr(N.S.) with 25mmx25mmx3mm angle frame all around and stiffened in between i/c hinges, handle, locking arrangement, painting with approved synthetic enamel paint i/c sign writing on glass at internal hydrant including providing & fixing S.S. sheet 2mm thick on remaining portion above door to close opening i/c painting etc. as required. Glass shall be 6 mm thick.	Item196	1.00	Each		0.00	INR Zero Only
15.19	Providing and fixing stainless steel standard fireman's axe with heavy insulated rubber handle tested to 20000 volts as per IS : 926 complete.	Item197	1.00	Each		0.00	INR Zero Only
15.20	Providing & fixing of 25mm dia. gummetal air release valve with all fittings and forged ball valve on header complete as required and as per enclosed specification.	Item198	1.00	Each		0.00	INR Zero Only
15.21	Providing and fixing reinforced neoprene rubber vibration eliminators / expansion joints (to provide relief from stresses at pipe flanges) suitable for upto 20 kg/cm2 pressure, complete as per specification.						
15.2101	80mm dia.	Item199	4.00	Each		0.00	INR Zero Only
15.22	Providing and fixing heavy duty copper armored cables 1.1 KVA grade including necessary support clamps at ceiling level and connection legs complete in all respects.						
15.2201	Power cable 3 core 16 Sq.mm	Item200	15.00	Metre		0.00	INR Zero Only
15.23	Supply, installation, testing and commissioning ISI marked (IS:15683) Fire Extinguisher, Carbon-di-oxide type capacity 4.5 Kg. Flat base including valve, discharge hose of not less than 10 mm dia, 1M long and complete in all respects including initial fill with CO2 gas conforming to IS:307-1966 and wall suspension bracket as required as per specifications.	Item201	6.00	Each		0.00	INR Zero Only
15.24	Supply, installation, testing and commissioning of 6kg ABC (Powder Type) Fire Extinguisher. Mild Steel Cylinders ISI marked fitted with pressure indicating gauge, internal tube, squeeze lever type valve fully charged with ABC 90 powder (Mono Ammonium Phosphate) pressured by Nitrogen complete in all respects including wall suspension bracket and conforming to IS:15683 as required as per specifications.	Item202	6.00	Each		0.00	INR Zero Only

15.25	Providing, fixing, testing and commissioning of control panel for Terrace Booster pumps . Incoming: MCCB 35A 1 set of Phase indicating lamps, 1 set of 35A AI bus bars, 1No Ammeter, 1No Voltmeter with phase selector switch Feeder for Booster Pumps - 2 No. 2 No. 32A TP MCCB without releases. DOL starter with over load relay, single phase preventor and indicating lamps with ON/OFF push buttons. 2 No. Automannual selector switch. Suitable for booster pumps	Item203	1.00	Each			0.00	INR Zero Only
16	Geysor and Heat Pump Work:							
16.01	Supplying, laying/ fixing, testing and commissioning of following thickness resin bonded fiber glass pipe section insulation having density 80 kg/cum or mineral wool (non combustible) having density of 144 Kg/ cu m duly covered with a layer of 120 gm/sqm polythene sheet (vapour barrier) on existing pipe and finally applying 0.63mm aluminium sheet cladding complete with type3, grade 1 roofing feltstrip(as per IS:1322 as amended up to date) at joints etc. as per specifications and as required.							
16.0101	50mm	Item204	9.00	Sqm			0.00	INR Zero Only
16.0102	40mm	Item205	8.00	Sqm			0.00	INR Zero Only
16.02	Providing and fixing in position the industrial type pressure gauges with gun metal / brass valves complete as required	Item206	2.00	Each			0.00	INR Zero Only
16.03	Providing, laying, testing & commissioning of 'B' class heavy duty G.I. pipe conforming to IS 1239 including welding, fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required .							
16.0301	40mm	Item207	20.00	Metre			0.00	INR Zero Only
16.0302	50mm	Item208	20.00	Metre			0.00	INR Zero Only
16.04	Supplying, Installation, testing and commissioning of Airsource Heat pump of 2500 Ltr capacity with minimum COP of 3.5. Refrigerant used should be environment friendly R-410a. Heat pump will heat water upto 55°C on heat pump mode. It will have silent operation and the sound level should not exceed 65 dB. Heat pump will have LCD display control panel with built in diagnostic and troubleshooting information. Heat pump will have an inbuilt cycle for defrosting in case icing occurs on evaporator. Heat Pump will have Temperature sensor , air relief valve and all accessories to run the heat pump on auto mode. The input & output power can vary as per manufacturer specification (2W+1S)	Item209	2.00	Each			0.00	INR Zero Only
16.05	Supplying, Installation, testing and commissioning of Hot Water Mixing Tank of cap. 2500 Ltrs complete with inlet cold water inlet/outlet, drain connection with flanges, with required manhole with bolted cover, including required no's ball valves, required no's dial type temperature guage, required no's Y strainers(Filter) complete in all respects, required no's pressure guage, With Water flow Switch, with Non return Valve, Air relief Valve, temperature and pressure relief valve. With two nos of thermowell. The tank shall be fabricated out of M.S of thickness (shell 4 mm & dish 6 mm), duly insulated with 100mm thick rock Wool insulation with 24 gauge aluminum cladding with MS supporting structure stand & support & drain valve. The tank shall be suitable for minimum 5 kg/sqcm working pressure & All valve and accessories shall be of PN 1.0 rating etc complete as required	Item210	1.00	Each			0.00	INR Zero Only
16.06	Supplying, Installation, testing and commissioning of following pumps suitable for 415 volts connected with T.E.F.C. Induction motor, M.S. Channel, base plate complete with vibration isolator, isolating valves on suction and discharge , pressure gauge with stop cock and dial type thermometer on suction & discharge. The pump shall be mechanical seal. The pump shall be SS casing, impeller, shaft and CI (Epoxy coated) base & EPDM Mechanical seal as required pump for circulation of water to heat pump. Including panel, cable, foundation , piping valves etc 2.5cum/hr 25m head (1W+1S)	Item211	2.00	Each			0.00	INR Zero Only
16.07	Supplying, Installation, testing and commissioning of following pumps suitable for 415 volts connected with T.E.F.C. Induction motor, M.S. Channel, base plate complete with vibration isolator, isolating valves on suction and discharge , pressure gauge with stop cock and dial type thermometer on suction & discharge. The pump shall be mechanical seal. The pump shall be SS casing, impeller, shaft and CI (Epoxy coated) base & EPDM Mechanical seal as required pump for return pump Including panel, cable, foundation , piping valves etc 2.5cum/hr 40m head (1W+1S)	Item212	2.00	Each			0.00	INR Zero Only
16.08	Supplying, Installation, testing and commissioning of Hot water Heat pump panel with return and supply pump connection with cable	Item213	1.00	Set			0.00	INR Zero Only
16.09	Hydropneumatic Terrace booster Pump							

16.0901	Hydropneumatic Pumping System With Fixed Frequency Drive Supply, Installation, Testing and Commissioning of compact packaged type skid mounted, self-contained variable frequency drive (wherever specified) hydropneumatic system complete as per following technical specification complete as required.-							
16.0902	(i) In-line vertical Single / Multistage centrifugal clear water pump set with SS-304 casing, SS-304 impeller with SS-316 shaft, CI base with CED coating complete directly coupled with TEFC induction motor of class "F" insulation & efficiency class IE-3, 2900rpm, suitable for operation on 415 Volts ±10%, 3 phase, 50 Hz A.C. supply complete.							
16.0903	(ii) The entire system shall be mounted on a common base frame w/ common suction and common delivery of G.I heavy class pipe headers with flanges, interconnecting piping with all required Control Valves, Non-return valves, pressure gauge with isolation cock etc. and all required accessories.							
16.0904	(iii) Pressure vessel capacity 100 & qty 1 of non corrosive FRP composite construction lined with NSF/ FDA listed material, like high density polyethylene with fully replaceable polyurethane. Air cell burst pressure of minimum of (3 / 5) times the vessel operating pressure and prototype cycle tested for(80,000 / 2,50,000) cycles with charging connectors to discharge pipe line with necessary flanges, gaskets, isolating valve, nuts / bolts etc. with suitable foundation bolts & other accessories, complete as required.							
16.0905	(iv) Panel mounted microprocessor multi pump controller with large graphical display and variable frequency drive (VFD) mounted inside a panel complete with pressure sensor transmitter. The graphical display capable to show number of pumps running & also communicate with other controllers following with open protocol through RS485 port. System should be capable to compensate for frictional losses at lower flows. All alarms should be displayed in the controller. The panel should also have provision for manual / automatic alternate (cyclic) operation of pumps, ON / OFF switch							
16.0906	(v) Necessary foundationing bolts, vibration elimination pads and other accessories complete as required.							
16.0907	(vi) The entire system alongwith pumps & control panel must be sourced from single manufacturer only for unit responsibility.							
16.0908	Capacity - 150 LPM							
16.0909	Head - 25M							
16.0910	No. of Pumps (1 working + 1 standby)	item214		1.00	Set		0.00	INR Zero Only
16.10	Supply, Installation, testing and commissioning of storage type electric hot water heater made out of heavy gauge steel jacket finished with rust proof baked-on glossy white enamel paint, inside glass lined heavy gauge steel tank, 25 mm thick polyurethane foam insulation, thermostatically controlled immersion heater with pilot neon lamp, replaceable magnesium anode bar, suitable for 8.0 bar maximum working pressure, cold water inlet and hot water outlet pipe, suitable length of electrical cable and 15 amp 3 pin plug top, complete in all respect including testing etc.							
16.1001	25 Ltr for Kitchen	item215		1.00	Each		0.00	INR Zero Only
16.11	Submersible single stage single entry pumps with C.I.body and C.I. two vane enclosed type impeller connected to TEFC submersible motor for 415 volts, 3 phase, 50 cycles including MCC panel with level controllers, auto control, sequential change over facility with one proper working at low level & two proper working at high level with an audible alarm including all interconnectivity cables, with both pumps connected to common outlet header including valves, non return valves, lifting chains etc. complete in all respect							
16.1101	(One working + One standby/both working in high flow conditions)							
16.1102	BASEMENT SUMP PUMP							
16.1103	(Solid handling capacity 10-12mm)							
16.1104	Capacity- 200 lpm (Each)							
16.1105	Head - 12 m	item216		1.00	Set		0.00	INR Zero Only
16.12	Water transfer pump from UGT to OHT							
16.1201	Providing, fixing, commissioning, testing and of open well submersible pump for each pump IP 58 protected electric enclosure comprising of 2 Nos. Electrical Driven Horizontal pumps with all accessories coupled to motor suitable for operation on 200-240 volts, 1 phase 2900 RPM, motor with SS 304 body all accessories such as NRVs, valves, common delivery header complete in all respects.							
16.1202	Pumps shall be suitable for 200-240volts 1 phase 50 Hz A.C supply & shall be having the following specifications. Moc of pump -Impeller- CI casing - CI shaft- SS 410							
16.1203	Delivery header including all GI pipes, CI valves, CI NRV, bourden type Pressure gauge & accessories complete.							

16.1204	All accessories for running two pumps with dry running protection etc.							
16.1205	Domestic Water Transfer Pump							
16.1206	Number of pumps : 2 Nos.(1 Working +1 stand by)							
16.1207	Flow Rate : 70 LPM							
16.1208	Head : 35 M	Item217	1.00	Set			0.00	INR Zero Only
17	Electrical Work Items:							
17.01	Wiring for light/fan point/ exhaust fan point/ call bell point with 1.5sqmm 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 1.5sqmm FRLS PVC insulated copper conductor single core cable etc as required.							
17.0101	Group B	Item218	700.00	Pts.			0.00	INR Zero Only
17.02	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.	Item219	26.00	Pts.			0.00	INR Zero Only
17.03	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit (included) as required.							
17.0301	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Item220	1200.00	Meter			0.00	INR Zero Only
17.0302	2 X 4.0 sq. mm + 1 X 4.0 sq. mm earth wire	Item221	1000.00	Meter			0.00	INR Zero Only
17.0303	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	Item222	350.00	Metre			0.00	INR Zero Only
17.0304	4 X 4 sq. mm + 2 X 4 sq. mm earth wire	Item223	200.00	Metre			0.00	INR Zero Only
17.04	Supplying and fixing of following sizes of PVC conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.							
17.0401	25 mm	Item224	200.00	Metre			0.00	INR Zero Only
17.0402	32 mm	Item225	200.00	Metre			0.00	INR Zero Only
17.05	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.							
17.0501	5/6 amps switch	Item226	350.00	Each			0.00	INR Zero Only
17.0502	15/16 amps switch	Item227	60.00	Each			0.00	INR Zero Only
17.0503	3 Pin 5/6 amps socket outlet	Item228	350.00	Each			0.00	INR Zero Only
17.0504	6 pin 15/16 amp socket outlet	Item229	60.00	Each			0.00	INR Zero Only
17.06	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. (GI box thickness shall be 1.6mm)							
17.0601	1 or 2 Module (75mmX75mm)	Item230	25.00	Each			0.00	INR Zero Only
17.0602	3 Module (100mmX75mm)	Item231	95.00	Each			0.00	INR Zero Only
17.0603	6 module (200mmX75mm)	Item232	52.00	Each			0.00	INR Zero Only
17.0604	8 Module (125mmX125mm)	Item233	78.00	Each			0.00	INR Zero Only
17.07	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25A modular socket outlet and 25 A modular switch including connections, painting etc. as required for AC/Gvsvr.	Item234	60.00	Each			0.00	INR Zero Only
17.08	Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CMM/W) minimum 6.85, Air delivery minimum 215 CMM, 350 RPM (tolerance as per IS: 374-2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise-75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required.	Item235	50.00	Nos			0.00	INR Zero Only
17.09	Wiring for following light points for the wardrobe and minibar cabinet with 1.5 sq.mm PVC insulated FRLS copper conductor 1100 volts grade stranded flexible wires of approved make in concealed 25 mm dia FRLS PVC conduit including fixing of 6 amps SP micro switch or concealed sensor of approved make, to be switched 'ON' or 'OFF' by the door of the wardrobe.							
17.0901	One point controlled by one no. switch / sensor	Item236	52.00	Pts			0.00	INR Zero Only
17.10	Wiring for 'Do not disturb, Make my room and call bell/Buzzer' with 1.5 sq. mm. PVC insulated FRLS copper conductor 1100 volts grade stranded flexible wires in concealed or surface mounted 25 mm dia FRLS PVC conduit including fixing (as per interior designer). Bell will not operate when the DND switch is "ON", neon indicating lamps on the plate of bell push button, two way switch with LED indicator on the suitable location and earthing of GI box with 1.5 sq mm PVC insulated FRLS copper conductor stranded flexible wire.	Item237	26.00	Pts			0.00	INR Zero Only
17.11	Wiring for Key card holder with 2.5 sq mm. 2 run wire. wiring Between room DB and Key card holder. Cost of conduit is included.	Item238	26.00	Point			0.00	INR Zero Only
17.12	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	Item239	26.00	No			0.00	INR Zero Only
17.13	Supplying and fixing key card holder complete as required.	Item240	26.00	No			0.00	INR Zero Only

17.14	Fixing of 2 No. 16 amps double pole 2 way master switch and wiring with 2.5 sqmm PVC insulated copper conductor 1100 volts grade stranded flexible FRLS wires of approved make in concealed 25mm dia FRLS PVC conduit and earthing of switch box with 2.5 sqmm copper conductor stranded flexible FRLS wires including the cost of switch box. (Cost of Master Switch not to be included)	Item241	26.00	Set		0.00	INR Zero Only
17.15	Supply installation testing & commissioning of 8 way SPN room DB, double door type with 8 Nos 6/16/20 Amps SP MCBs as outgoing and 1 No. 40 A DP MCB as incomer and 40A inbuilt DP Contactor with suitable NO / NC auxiliary Contacts as per SLD including control relay for thermostat & key card.	Item242	26.00	Nos.		0.00	INR Zero Only
17.16	Supply installation testing & commissioning of Switch plate with one switch for "Do not Distrib", One switch for "Make my room Switch". Key card holder & 1 No. Switch for Vestibule area lights WITH GI Box.	Item243	26.00	Set		0.00	INR Zero Only
17.17	Supply installation testing & commissioning of Switch plate with 1 No. Do not distrib indicator, 1 No. Make my room indicator & 1 No. door bell push button WITH GI Box.	Item244	26.00	Set		0.00	INR Zero Only
17.18	Supply, loading, transportation unloading at site, storages at site ,shifting from storage place to site, installation of following sizes of XLPE insulated PVC sheathed, Aluminium/copper galvanized steel round wire/ flat strip armoured cable armoured power cable of 1.1 KV grade conforming to IS amended upto date and as per specifications.						
17.1801	3.5C x 185 Sqmm AL	Item245	200.00	Metre		0.00	INR Zero Only
17.1802	3.5 C x 35 Sqmm Cu						
17.1803	4 C x 25 Sqmm Cu						
17.1804	4 C x 16 Sqmm Cu	Item246	100.00	Metre		0.00	INR Zero Only
17.1805	4C x 10 Sqmm Cu						
17.1806	4C x 6 sqmm Cu	Item247	200.00	Metre		0.00	INR Zero Only
17.1807	4C x 4 sqmm Cu	Item248	200.00	Metre		0.00	INR Zero Only
17.1808	3C x 6 sqmm Cu	Item249	1200.00	Metre		0.00	INR Zero Only
17.1809	3C x 4 sqmm Cu						
17.1810	1 C x 6 Sqmm Cu flexible cable for UPS earthing	Item250	50.00	Metre		0.00	INR Zero Only
17.19	Supplying and making indoor end termination with brass compression gland and copper lugs for following size of XLPE insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1KV grade as required						
17.1901	3.5C x 185 Sqmm AL	Item251	4.00	Each		0.00	INR Zero Only
17.1902	3.5 C x 35 Sqmm Cu						
17.1903	4 C x 25 Sqmm Cu						
17.1904	4 C x 16 Sqmm Cu	Item252	4.00	Each		0.00	INR Zero Only
17.1905	4C x 10 Sqmm Cu						
17.1906	4C x 6 sqmm Cu	Item253	12.00	Each		0.00	INR Zero Only
17.1907	4C x 4 sqmm Cu	Item254	20.00	Each		0.00	INR Zero Only
17.1908	3C x 6 sqmm Cu	Item255	70.00	Each		0.00	INR Zero Only
17.1909	3C x 4 sqmm Cu						
17.1910	1 C x 6 Sqmm Cu flexible cable for UPS earthing	Item256	4.00	Each		0.00	INR Zero Only
17.20	Providing and fixing of fire retardant sealant on wall / floor crossings/Manholes.	Item257	20.00	Sqmtr		0.00	INR Zero Only
17.21	Supplying and installing following size of perforated Hot Dipped Galvanized iron cable tray (galvanisation thickness not less than minimum 70 microns) with perforation not more than 17.5% in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, bends, reducers, tee etc. as required.						
17.2101	150 mm width X 50 mm depth X 1.6 mm thickness	Item258	200.00	Metre		0.00	INR Zero Only
17.2102	300 mm width X 50 mm depth X 1.6 mm thickness	Item259	300.00	Metre		0.00	INR Zero Only
17.22	Supplying and fixing following way, horizontal type three pole and neutral sheet steel MCB distribution board, 415 Volts, on surface/recess, complete with tinned copper busbar, neutral busbar, earth bar, din bar, interconnections, powder painted including earthing, numbering etc. as required. (But without MCB/RCCB/Isolator)						
17.2201	6way (4+18). Double door	Item260	2.00	Each		0.00	INR Zero Only
17.2202	8way (4+24). Double door	Item261	1.00	Each		0.00	INR Zero Only
17.2203	12way (4+36). Double door	Item262	1.00	Each		0.00	INR Zero Only
17.23	Supplying and fixing following way, horizontal type Single pole and neutral, sheet steel MCB distribution board, 240 Volts, on surface/recess, complete with tinned copper busbar, neutral busbar, earth bar, din bar, interconnections, powder painted including earthing, numbering etc. as required. (But without MCB/RCCB/Isolator)						
17.2301	12way SPN	Item263	2.00	Each		0.00	INR Zero Only
17.24	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.						
17.2401	Single Pole	Item264	120.00	Each		0.00	INR Zero Only
17.25	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.						
17.2501	40amps	Item265	7.00	Each		0.00	INR Zero Only
17.2502	25amps	Item266	8.00	Each		0.00	INR Zero Only

17.26	Supplying and fixing of following rating, four pole , 415 volts,MCB in the existing MCB DB complete with connections, testing and commissioning etc. as required.								
17.2601	63 amps	item267	2.00	Each				0.00	INR Zero Only
17.2602	32 amps	item268	4.00	Each				0.00	INR Zero Only
17.27	Supplying and laying 50 mm X 6 mm GI strip including connection/terminating with nut, bolt, spring, washer etc. as required. (Joining shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm).	item269	200.00	Metre				0.00	INR Zero Only
17.28	Supplying and laying 50 mm X 6 mm CU strip including connection/terminating with nut, bolt, spring, washer etc. as required. (Joining shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm).	item270	10.00	Metre				0.00	INR Zero Only
17.29	Supplying and laying 25 mm X 5 mm copper strip including connection/terminating with nut, bolt, spring, washer etc. as required. (Joining shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm).	item271	50.00	Metre				0.00	INR Zero Only
17.30	Supplying and laying 25 mm X 5 mm GI strip including connection/terminating with nut, bolt, spring, washer etc. as required. (Joining shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm).	item272	200.00	Metre				0.00	INR Zero Only
17.31	Providing and Fixing 6 SWG GI wire for DBs etc wherever required	item273	300.00	RM				0.00	INR Zero Only
17.32	Supply, Installation, Testing & Commissioning of UL listed, CPRI Tested maintenance free copper coated earth rod of 3 metre having diameter of 25mm with 250 micron copper coating with clamp made of stainless steel or gun metal for terminating cable / flat conductor. Rod shall be short circuit tested from CPRI for minimum of 85 kA peak. Earth enhancing mineral (PROCEM) compound shall be non-bentonite 25 kg tested for Leaching & TCLP with NABL accredited lab.	item274	8.00	Nos.				0.00	INR Zero Only
17.33	SITC of 10 kVA 1 phase IN & 1 phase Output online UPS with 60 mins back up. The non-redundant UPS shall comprise a solid state rectifier/ battery charger, battery, a solid state inverter, static switches and stand-by regulated AC supply, battery racks etc .	item275	1	Nos				0.00	INR Zero Only
17.34	Main LT Panel								
17.3401	Incoming								
17.3402	2 Nos. 250 amps 4 pole MCCB Microprocessor based with O/L, S/C, inbuilt E/F Protection (35KA)								
17.3403	1 No. 63 amps 4 pole MCCB Microprocessor based with O/L, S/C, inbuilt E/F Protection (35KA) for Roof top solar plant								
17.3404	3 Nos. Digital Multi-function meter with RS 485 communication port of accuracy class-1 model no Rish master 3440 or equivalent								
17.3405	3 sets of Breaker ON / OFF / TRIP indicating lights with control MCB's.								
17.3406	3 sets of 0-500 Volt digital voltmeter with selector switch 96 x 96 mm sq. & phase indicating lamps connected through 415 V 3 : 110 V 3 PT's. Primary and Secondary of PT's shall be protected by 2 amp TP MCB's.								
17.3407	3 sets of 0-250 Amps digital electronic ammeter with selector switch with 3 nos. 250/5A, 15VA, CL-1.0 Current Transformer								
17.3408	3 sets of ON / OFF / TRIP indicating lights with control MCB's.								
17.3410	Bus Bars								
17.3411	300 amps TPN aluminium bus bars (35 kA/sec) with coloured heat shrinkable insulation sleeve.								
17.3412	1 No Surge protection device Type 1 & 2 (Class B & C), 4 Mode, MOV type suitable for B/ 20us surge.Voltage Protection level Up < 1.8kV, Operating Temperature -40 deg 'c' - +80 deg 'C'. Connected Between 3Nos. phase to neutral and 1Nos. neutral to earth with discharge Current I _{max} ≥ 40kA Per mode & In ≥ 20kA per Mode. Make & Model: Argos-AG-230-40T2-E or eq. SPD with 63A 4P HRC fuses of 100kA breaking capacity. For connecting SPD minimum 10sqmm copper wire must be used & length of connecting leads shall not be more than 500mm for per mode connection with each busbar including all necessary accessories. The SPD shall compliance with IEC 61643-11 and certified by TUV,CE,ROHS,UL94V-0.								
17.3413	Outgoing								
17.3414	40 amp DP MCB(10kA)	28Nos.							
17.3415	32 amp FP MCB(10kA)	06Nos.							
17.3416	63 amp FP MCB(10kA)	04Nos.							
17.3417	16 amp FP MCB(10kA)	06Nos.							
17.3418	63 amp DP MCB(10kA)	01Nos.							
17.3419	Main LT Panel as described above	item276	1.00	Set				0.00	INR Zero Only
17.35	UPS Panel								
17.3501	Incoming								
17.3502	1Nos. 63amps DP MCB (10kA)								
17.3503	Bus Bars								
17.3504	100 amps TPN aluminium bus bars with coloured heat shrinkable insulation sleeve.								

17.3505	1 No Surge protection device Type 1 & 2 (Class B & C), 4 Mode, MOV type suitable for 8/ 20us surge,Voltage Protection level Up < 1.8kV, Operating Temperature -40 deg 'c' - +80 deg 'C', Connected Between 3Nos. phase to neutral and 1Nos. neutral to earth with discharge Current I _{max} ≥ 40kA Per mode & I _n ≥ 20kA per Mode. Make & Model: Argos-AG-230-40T2-E or eq. SPD with 63A 4P-HRC fuses of 100kA breaking capacity. For connecting SPD minimum 10sqmm copper wire must be used & length of connecting leads shall not be more than 500mm for per mode connection with each busbar including all necessary accessories. The SPD shall compliance with IEC 61643-11 and certified by TUV.CE,ROHS,UL94V-0.						
17.3506	Outgoing						
17.3507	32 amp DP MCB(10kA)	04Nos.					
17.3508	16 amp DP MCB(10kA)	02Nos.					
17.3509	UPS Panel as described above	Item277	1.00	Set		0.00	INR Zero Only
17.36	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, atleast 2mm thick, and vitreous enamelled white on both sides, and with inscription in single red colour on front side as required.	Item278	1.00	Each		0.00	INR Zero Only
17.37	Supply and fixing suitable size wooden framed covered with glass for Main Panel SLD in electrical room as per IE rules fixed to wall as required.	Item279	1.00	Each		0.00	INR Zero Only
17.38	Supply and providing ISI marked electrical 1.1 kV grade 3 mm thick anti-skid rubber mat, 2 x 1 mtr as per IS:15652-2006 with up to date amendment.	Item280	5.00	Each		0.00	INR Zero Only
17.39	ABC type duly refilled 6 Kg & ready to use	Item281	2.00	Each		0.00	INR Zero Only
17.40	Providing & fixing Fire Extinguishers as per IS Dry chemical powder type -5kg	Item282	2.00	Each		0.00	INR Zero Only
17.41	Providing & fixing of 'No Smoking' and 'No Unauthorized Entry' signboards in English and Hindi, as per IPR- 1970.	Item283	2.00	Each		0.00	INR Zero Only
17.42	Supplying, installing, testing and commissioning of 1 Door Controller 1 Door / 2 Reader IP Controller Supports access control of up to 1 doors in all respect including 1 entry readers, 1 exit readers, 1 locks, 1 exit switches etc.Protected Enclosure for Controller Both controller & power supply unit in this door control panel are protected with suitable housing so that electronic circuit boards are not exposed to cause any accidental damage,30,000 card holders, 55,000 time stamped events storage capacity, LED Control, buzzer control & reader tamper switch input,2 MB flash data memory	Item284	1.00	No.		0.00	INR Zero Only
17.43	Supplying, installing, testing and commissioning of Contactless Smart card reader (OSDP) support 125 KHz, ASK, 13.56MHz,ISO/IEC 14443A reader range upto 5cm with TriColor LED indication, BLE supported, UL94 Polycarbonate and IP65 rating.	Item285	1.00	No.		0.00	INR Zero Only
17.44	12 V/24V DC Power Supply for Card reader Access Control system	Item286	1.00	No.		0.00	INR Zero Only
17.45	Exit push button-Stainless steel button made of aluminium alloy 75 x 75 x 5mm size.	Item287	1.00	No.		0.00	INR Zero Only
17.46	Emergency Break Glass	Item288	1.00	No.		0.00	INR Zero Only
17.47	High performance Static Electro Magnetic Lock, Fail safe						
17.4701	Double-door Magnetic Lock; Supports static linear thrust of 2 x 300kg Working Current: 12V/500mA*2 24V/250mA*2	Item289	1.00	No.		0.00	INR Zero Only
17.4702	12 VDC, 2 A Power Supply for Magnetic Lock	Item290	1.00	No.		0.00	INR Zero Only
17.48	LZ-Bracket of Magnetic Lock or U-Bracket of Magnetic Lock	Item291	2.00	No.		0.00	INR Zero Only
17.49	Magnetic Door Contacts	Item292	2.00	No.		0.00	INR Zero Only
17.50	Piezo Buzzer audio alarm in case exit door remains open, complete with all accessories.	Item293	1.00	No.		0.00	INR Zero Only
17.51	Supply , laying , testing and commissioning of FRLS multi core shielded flexible PVC insulated copper conductor wires in existing FRLS PVC conduit complete with cable terminations						
17.5101	4 core - 18 AWG Controller to E.M. Lock, contact, sensor, exit push button, Buzzer etc.	Item294	50.00	Mtr.		0.00	INR Zero Only
17.52	20 mm dia of ISI marked FRLS PVC conduit along with the accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.	Item295	50.00	Mtr.		0.00	INR Zero Only
17.53	Supply, installation, testing and commissioning of 24 Port Network Switches (2 SFP port for uplink gigabyte) with following feature :- 1) Indicators - Power, Link/Activity/Speed (per 10/100/1000 Mbps Port), Link/Activity (per SFP Port), Fan (per Device), Button to Switch LED Display Mode between PoE and Link/Activity.2) Speed - 10/100/1000 Mbps. 3) Hardware memory - Packet Buffer Memory: 1 MB per Device. 4) Additional feature - Certifications: FCC Class A, CE Class A, ICES-003, VCCI Class A, C-Tick, BSMI, Media Interface Exchange: Auto MDI/MDI-X Adjustment for all Twisted-pair Ports, Transmission Method: Store-and-forward, MAC Address Update: Upto 256 Static MAC Entries, Enable/disable Auto-learning of MAC Addresses, Maxim. View More Certifications: FCC Class A, CE Class A, ICES-003, VCCI Class A, C-Tick, BSMI, Media Inter. 5) Type - Managed.	Item296	4.00	No		0.00	INR Zero Only
17.54	Supply, Installation testing and commissioning of 19" Modular Patch-1 U Patch Panel 24, RJ 45 Cat-6 connector.	Item297	4.00	No		0.00	INR Zero Only
17.55	SITC of 19 Inch 42U with PDU and FAN 600X600mm Network Rack with PDU 12 Sockets, Server Tray(2 Nos), Cable Organiser 1U Closed, 4 Fan & Hardware Kit - Combo Pack	Item298	1.00	No		0.00	INR Zero Only

17.56	SITC of duplex white color faceplate.	Item299	80.00	No		0.00	INR Zero Only
17.57	SITC of RJ45 Voice outlet with red colour female RJ45 connector	Item300	35.00	No		0.00	INR Zero Only
17.58	SITC of RJ45 data outlet with blue colour female RJ45 connector	Item301	50.00	No		0.00	INR Zero Only
17.59	SITC of TV coaxial outlet	Item302	30.00	No		0.00	INR Zero Only
17.60	SITC of HDMI port outlet	Item303	1.00	No		0.00	INR Zero Only
17.61	Supply, Installation testing and commissioning of patch cord as mentioned below :- CAT 6 RJ 45 Patch Cord F/UTP 1 Mtr. Color Blue.	Item304	100.00	No		0.00	INR Zero Only
17.62	Supply, Installation testing and commissioning of patch cord as mentioned below :- CAT 6 RJ 45 Patch Cord F/UTP 1 Mtr. Color red.	Item305	70.00	No		0.00	INR Zero Only
17.63	Supplying and drawing 4 pair shielded, 0.5 mm PVC Insulated copper conductor un-armoured Cat-6 computer cable FRLS in existing surface / concealed, steel / PVC. Conduit/Casing-N-Capping as required.	Item306	1525.00	Meter		0.00	INR Zero Only
17.64	Supplying and fixing 25mm FRLS PVC conduit ISI marked alongwith the accessories in concealed system including painting etc. as required.	Item307	500.00	Meter		0.00	INR Zero Only
17.65	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.	Item308	800.00	Meter		0.00	INR Zero Only
17.66	Supplying and drawing High speed HDMI 2.1 cable	Item309	2.00	Meter		0.00	INR Zero Only
17.67	Supply of Ceiling Mounted Access Point Wi-Fi 5Ghz (Dual band) Support for Power of Ethernet 802.3, Device Interfaces:-1 x RJ45 console port, 1 x 10/100/1000 Ethernet (PoE) LAN, factory reset, power input, Antennas -2 x dual-band internal antennas, Data Signal Rate:-Up to 1800 Mbps, Functionality Standards:-IEEE 802.11a/b/g/n/ac/ax, IEEE 802.3u/ab, IEEE 802.3az Energy-Efficient Ethernet (EEE), IEEE 802.3at PoE, Security Protocol:-WPA/WPA2/WPA3™ Personal/Enterprise, WEP 64/128-bit, SSID broadcast disable, MAC address access control, internal RADIUS server, Network Management:-Web (HTTP), Secure Socket Layer (SSL), Traffic control, D-Link Nuclias Connect, Power Supply:-12 V / 2.5 A (optional power adapter), IEEE 802.3at PoE, Certifications:-CE, FCC	Item310	6.00	No		0.00	INR Zero Only
17.68	SITC of - EPABX Communication System Servers with 50 pair tag block 50 pair armoured riser cable of approx. 100 meter . - Phones for the staff (Excluded)	Item311	1.00	No		0.00	INR Zero Only
17.69	Testing , commissioning, Crippling & cable ties etc...	Item312	1.00	L/S		0.00	INR Zero Only
17.70	Design, manufacture, testing at manufacturers works, supply, packing, forwarding and delivery including transit insurance from place of storage/ manufacturer's works to erection site, installation, commissioning and performance demonstration of 10 KWp Roof top solar PV power plant including all items like PV module, inverter, PV module mounting structure, cabling, connector. All Items should be complete in all respect to the satisfaction of engineer in charge.	Item313	1.00	Nos		0.00	INR Zero Only
18 HVAC Low Side Work Items:							
18.01	Supply, installation & commissioning of powder coated 16G GI raceway with cover top						
18.0101	150 mm width X 50 mm depth X 1.6 mm thickness	Item314	175.00	RMT		0.00	INR Zero Only
18.0102	200 mm width X 50 mm depth X 1.6 mm thickness	Item315	100.00	RMT		0.00	INR Zero Only
18.02	Supply, Installation of Glass cloth and minimum two layers of UV protection paint STARBOND make to be applied over insulation for all exposed pipes	Item316	200.00	RMT/Circuit		0.00	INR Zero Only
18.03	Supply & installation of uPVC piping complete with P type trap, 6kg/cm ² drain water piping with fittings, supports as per specifications and duly insulated with 9mm thick. Piping shall be inclusive of chasing in wall wherever required. Closed cell nitrile rubber insulation.						
18.0301	Price shall include connection/termination with saddle/suitable arrangement as directed by engineer in-charge						
18.0302	dia 25 mm	Item317	350.00	RMT		0.00	INR Zero Only
18.0303	dia 32 mm	Item318	50.00	RMT		0.00	INR Zero Only
18.04	Supply, Installation, Testing and Commissioning of Auto timer cycling Sequencing of Split units with controller along with enclosure/accessories as per requirement for sequenced Start/Stop for following split units :						
18.0401	Two number Split units including one standby	Item319	1.00	Sets		0.00	INR Zero Only
18.0402	Supply & installation of Inline drain pump with all accessories for Split Hi wall AC	Item320	2.00	Sets		0.00	INR Zero Only
18.0403	Maximum flow rate: 10L/Hr						
18.0404	Maximum delivery height: 10M						
18.0405	Maximum suction height: 1.5M						
18.05	Supply, Fabrication & fixing of Angle iron stand / Chowki works with including painting with one coat of red oxide paint & 2 coat for enamel paint etc complete as per approval & instruction.						
18.0501	High Wall Split AC Stand: 1TR / 1.5TR / 2.0 TR	Item321	35.00	Set		0.00	INR Zero Only
18.0502	DX Cassette AC Stand: 3.0 TR	Item322	3.00	Set		0.00	INR Zero Only

18.06	Supply, Installation, Testing & Commissioning of copper refrigerant piping complete with copper fittings & charge of refrigerant gas for the above split units. Piping associated with split units to be insulated with 9mm thick closed cell elastomeric insulation with class 'O' fire retardant properties in tubing form as required. Piping shall be laid over duly painted slotted angle trays fixed with GI clamps. Quoted Price shall be inclusive of UV protection paint for all exposed pipes of approved make.								
18.0601	Pair of Soft refrigerant piping for split packages with compressor.								
18.0602	Capacity: 1TR / 1.5 TR / 2.0 TR	Item323	525.00	RMT / CKT				0.00	INR Zero Only
18.0603	Capacity: 3.0 TR / 3 Phase	Item324	50.00	RMT / CKT				0.00	INR Zero Only
18.07	Providing & Fixing control cum transmission wiring of 4 core x 2.5 sq. mm copper in MS conduit between Indoor and Outdoor unit and for remote control insulation. DX Units	Item325	400.00	RMT				0.00	INR Zero Only
18.08	Providing & Fixing control cum transmission wiring of 4 core x 4.0 sq. mm copper in MS conduit between Indoor and Outdoor unit and for remote control insulation. DX Units	Item326	200.00	RMT				0.00	INR Zero Only
18.09	Supply, installation, balancing and commissioning of factory fabricated GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per approved drawings and specifications of following sheet thickness complete as required.								
18.0901	Thickness 0.63 mm sheet	Item327	125.00	SQM.				0.00	INR Zero Only
18.10	Supply, installation, balancing and commissioning of site fabricated GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per approved drawings and specifications of following sheet thickness complete as required.								
18.1001	Thickness 0.63 mm sheet	Item328	25.00	SQM.				0.00	INR Zero Only
18.11	Supply, Installation & testing of non-insulated flexible duct made of a double lamination of film permanently bounded to a coated spring steel wire helix. The outer jacket made of double laminated film including necessary supports, flexible hangers etc. complete as per specification in accordance with the approved shop drawings and required by the specifications and as per approved sample. The length mentioned is in the fully expanded position.								
18.1101	100mm Dia	Item329	100.00	RM				0.00	INR Zero Only
18.1102	150mm Dia	Item330	50.00	RM				0.00	INR Zero Only
18.12	Providing & Fixing thermal insulation of ceiling under deck insulation minimum 75 mm thick high density polystyrene blocks 30kh/cum density with TF quality using 0.05 mm thick Aluminiumfoil on exposed surface followed by 0.58 mm dia and 25 mm mesh G.I wire netting, fixed to ceiling with metallic cleats (50x50x3mm) @ 60 cm at various elevations with raw plugs including clips. All complete as per direction by Engineer in charge.	Item331	220.00	SQM.				0.00	INR Zero Only
18.13	Supplying, Fixing, testing and commissioning of powder coated extruded aluminium Exhaust air grille without VCD with related accessories and fittings.	Item332	3.00	SQM.				0.00	INR Zero Only
18.14	Supplying, Fixing, testing and commissioning of powder coated extruded aluminium Non vision type double louvered type Door Transfer grilles for Toilets door with related accessories and fittings.	Item333	7.00	SQM.				0.00	INR Zero Only
18.15	Supply, installation, testing and balancing of extruded aluminium construction louver with 18G frame and 20G blades & aluminium mesh shall be provided to act as bird screen, louvers shall be with minimum 20 mm wide flanges all around.	Item334	2.00	SQM				0.00	INR Zero Only
18.16	Supply, installation, testing and balancing of extruded aluminium construction gravity louvers having 18G frame and 20G louver blades	Item335	2.00	SQM				0.00	INR Zero Only
18.17	Supply, Installation, Testing of 125mm deep antivibration flexible joints. Flexible connections shall be constructed using imported fire retardant fabric with extruded GI frame/flange on both sides.	Item336	29.00	Sets				0.00	INR Zero Only
Total in Figures									0.00 INR Zero Only
Quoted Rate in Figures									0 Zero Only
Quoted Rate in Words									INR Zero Only

4 Construci Item5

10 Nos