BEML LIMITED, BANGALORE

Tender Number: 6300039768	Period of contract:	Three Months (03 Months)
	EMD Amount	Rs. 1,96,170

Sub: Proposed Upgradation, facelifting work & associated civil works in Director (R&M) Office at Ground floor of admin block, Bangalore Complex, BEML Limited, Bangalore.

SCHEDULE 'A' - BILL OF QUANTITIES

	SCHEDULE A - BILL OF QUANTITIES						
SI. No	Description	Unit	Qty	Rate/unit in fig. & in words Rs.	Amount (Rs)		
Α	INTERIOR WORKS						
1	Preparation & submission of design detail & interiors drawing as hard copy (03 copies A2 or A3 size, colour drawings) and soft copy (both in Autocad & PDF) viz Plan, sections, elevations, interiors of proposed upgradation of Director (R&M) Office. The L-1 Contractor shall submit the detailed architectural & interior designs and drawings (plans, interior layout, elevations) of Civil, Electrical, Networking in 3D view format along with a walk through. And incorporate any further suggestions and changes suggested by BEML. Note: Contractor should submit 2 options of Architectural & interior drawings, out of which BEML will select either 1 option to go for further process. Note:1) The approximate (tentative) plinth area considered under the scope of work is: 150-180 sqm. 2) If any other additional item operates other than the items specified in BOQ, the same will be operated as non-Tendered items & the bill is prepared based on actual worked and submission of invoice.	JOB	1.00				
2	Gypsum False ceiling with Cove light: Supplying and fixing gypsum board false ceiling (at different levels) in G.I. frame in 24 to 26 guage main frame bottom to bottom distance at 600mm, with cross patties at 450mm centre to centre with 24 to 26 guage angle cleats size 25mm X 25mm supported at 750 mm centre to centre with 12 mm gypsum ceiling board of first quality, conforming relevant IS, manufactured by M/s Saint gobain/India Gypsum/Armstrong with sheet metal screws. The rate shall be inclusive of cutouts for lights. The ceiling shall be in perfect level and smooth in finish etc. all complete and as specified and directed by Engineer in charge. Note: Rate quoted for the item deemed to include all wastages.	Sqm	70.00				

	LAY IN TYPE STANDARD PERFORATED			
	METAL TILES WITH ACOUSTIC FLEECE OF			
	MAKE KNAUF OR LD2 EXPOSED SHILOUTE			
	GRID SYSTEM WITH FULL TILES			
	Providing & Fixing horizontal level suspended			
	ceiling comprising of Knauf GI Micro look Lay-in			
	Standard Perforated metal ceiling consisting of			
	600x600mm (Nominal Size) Lay-in tiles of 120			
	gsm galvanized steel as per IS 277 (2003)			
	suitable for architectural finishes in 0.5 mm			
	thickness as per IS:513 (1994) in Global white			
	colour with Square Tegular/Microlook 90° edge			
	having 8mm drop and 5.5mm flange. Tile shall			
	have perforation having hole diameter 2.5mm			
	and open area 16% with linear and diagonal pitch			
	of 5.5mm and 7.7mm respectively and a border			
	of 10mm. The difference between the 2 diagonal			
	dimensions of the tile to be less than 1mm. Tiles			
	shall be flattened by precision leveller to minimize			
	sag to less than 1/400mm. The tile shall be			
_	electrostatically polyester powder coated using		225.00	
3	RoHS compliant powder having coating thickness	Sqm	235.00	
	ranging from 60-80 microns. The powder coating			
	shall pass Salt Spray Test for 750 Hours as per			
	ASTM B117, QUV –A Test for 1000 hours as per			
	ASTM G-154 – (Cycle – 1) and Humidity test for			
	1000 hours as per DIN 50017. The powder coating shall have an adhesion of GTO as per EN			
	ISO 2409. The shade variation across batches			
	shall be delta E<1 using Excite/BYK Gardner			
	instrument and gloss level 25±5% at 60° as per			
	ASTM D523. The tile shall have a Light			
	Reflectance of \geq 63% in accordance with ASTM			
	1477-98. Back side of the tile will have Sound tex			
	fleece hot pressed mechanically for uniform			
	bonding to achieve NRC up to 0.7 (Average value			
	of Absorption Co-efficient readings taken at 250			
	Hz, 500 Hz, 1000 Hz and 2000 Hz) as per ASTM			
	C-423 and Fire Performance of Class 0/1 as per			
	BS 476 Part 6 & 7 in module size of 600x600mm.			
	All border cut tiles shall be laid, using Knauf lay-			
	in end cap for installation to have a Micro look			
	effect on perimeters.			

The metal tiles shall have the following parameters:

- a) Base material: 120 GSM Galvanised steels in 0.5mm thick conforming to relevant IS:277.
- **Panel** Dimension: 600mmx600mm/595mmx595mm.
- c) Panel Thickness: 0.5mm thick conforming to IS 513 (1994).
- d) Perforation details: Hole diameter 2.5mm & open area 16% with linear and diagonal pitch of 5.5mm and 7.7mm & a border of 10mm.
- e) Panel finish: Electrostatically polyester powder coated using RoHS compliant powder having coating thickness ranging from 60-80 microns. Salt Spray Tested for 750 Hrs/ QUV -A Test for 1000hours/ Humidity test for 1000hours. Adhesion of GTO as per EN ISO 2409. The shade variation within a manufacturing batch shall be delta E<1 using Excite/BYK Gardner instrument and gloss level 25±5% at 60°, conforming to relevant IS: ASTM B117 (Salt Spray Test) / ASTM G-154 - (Cycle - 1) (QUV-A Test) / DIN 50017 (Humidity Test) 2409 ΕN **ISO** (Adhesion) ASTM D523 (Gloss).
- f) Noise reduction coefficient: up to 0.7, conforming to relevant: ASTM C-423 (Average value of Absorption Co-efficient readings taken at 250 Hz, 500 Hz, 1000 Hz and 2000 Hz).
- g) Fire properties: class 0/1, conforming to BS:476 PART 6&7.
- H) Light Reflectance: 63%, conforming to: ASTM:1477-98.
- I) Dimensional tolerance: +_2mm.

SUSPENSION: The tile shall be laid on Shiloute grid with black revel suspended from true roof by using GI wite and Butterfly clamp The rate is deemed to include for Providing & removal of scaffolding wherever necessary b) Wastages. 3) Removing all splashes, dirt, etc. and leaving

premises in a clean state.

4	Wall Panelling: Removing the existing wall panelling & stacking at a place and handing over to BEML in good condition & providing & fixing new wooden panelling made out of 12mm thick BWP plywood with suitable frame gridwork wherever required and the panelling shall be covered with 1.0mm thick laminate (exposed/One side) shade milky white manufactured by M/s. VIRGO/ARCHID/GREENLAM) etc., complete all as specified and directed by the Engineer in charge. Note: a) quoted rate deemed to be include of all wastages b) Make of Plywood and laminate shall be of M/s Archidply/Kitply/ Greenply/Century C)The quoted rate is deemed to include for buffing the plywood sheet joints, applying metal paste to the exposed screw heads, applying putty to the plywood sheet joints and applying a coat of primer to one face of plywood sheets to achieve a smooth finish so as to facilitate fixing of wall paper which will be measured and paid separately Wall Acoustic:- Supplying & fixing of Wall	Sqm	20.00	
5	Acoustic By using 50 x25 x 0.8mm thick aluminium hollow section frame grid of Jindal on existing wall with infill polyester wool and 12 mm exterior grade MDF of approved brand Archid ply or equivalent on frame work to create proper 1st level level by using screws, adhesive to receive 12 mm thick KARIKA PET panel of Moisture and fire resistance of approved colour to form a combination of design pattern to be select by BEML limited. The designed KARIKA PET panel to be surrounded by 1 mm thick Archid laminate with backing of 10 mm thick exterior grade MDF to match the overall design level of KARIKA PET panel. The design pattern to have approximate 30 to 40 % laminate panel and 70 to 60% KARIKA PET panel. etc., complete all as specified and directed by Engineer in charge	Sqm	30.00	
6	ROLLER BLINDS FOR WINDOWS Providing and fixing 100mm wide venitian blinds of window fashion fabric of M/s Vista Levalor/Mac/ NR industries / Window fashion make, with 50mm thick powder coated channel with balance, imported crylic self alignable mechanism and equally placed spacers a, imported tilting of approved shade/colour and design etc., complete including all necessary accessories and hard ware items all as specified and as directed by Engineer In Charge.	Sqm	45.00	

	FULL HEIGHT TOUGHENED GLASS PARTITION WITH DOOR: Providing and fixing full height up to ceiling partition partly /FULLY panelled and partly/FULLY glazed consisting of Sal wood frame work treated for anti-termite of size 45X45mm (finished measurement 600mm (approx.) c/c in vertical direction and four nos. in horizontal direction, one each at ceiling & floor level and two intermediates, the partition about horizontal direction.			
7	intermediates, the partition shall have both side 6mm thick ply fixed with 1mm thick Laminate of approved colour and make with approved adhesive in top and bottom panel and 12 mm thick clear sheet glass (toughned) with etching of approved design fixed with all round beach wood beading of size 35X25mm including polishing. The wooden frame work shall be adequately fixed to walls/ceiling/columns/floor with necessary fasteners, including necessary strengthening at doors and window openings etc., complete as directed by the Engineer in-charge of the work, as per drawing/design. Glass partition fixed with patch fittings at floor level firmly.	Sqm	30.00	
8	Supplying and fixing of 60 mm aluminium eassy fix bent profile skirting with silicon and 3 M tape including all necessary accessories and hard ware items all as specified and as directed by Engineer In Charge.	RMT	35.00	
9	LOW HEIGHT STORAGE up to 750mm height in executive cabin and as serving table in conference hall: Supplying & fixing 18mm thick pre-laminated boards with 2 mm thick PVC edge- banding. The shutters will be swing door type. The storage units will be provided with shelves considering the height. The handles will be stainless steel powder or chromium finish. Levelers will be provided for countering the uneven floor surface and including all necessary fittings. (Make: V2 modular/ Neonspace, complete all as specified and directed by Engineer in charge.	Sqm	10.00	
10	FULL HEIGHT STORAGE upto 2100mm height in Storage room hall: Supplying & fixing 18mm thick pre- laminated boards with 2 mm thick PVC edge- banding. The shutters will be swing door type. The storage units will be provided with shelves considering the height. The handles will be stainless steel powder or chromium finish. Levelers will be provided for countering the uneven floor surface and including all necessary fittings. (Make: V2 modular furniture/ NeonSpace., complete all as specified and directed by Engineer in charge.	Sqm	18.00	

11	MEDIUM HEIGHT STORAGE 1200mm height: Supplying & fixing 18mm thick prelaminated boards with 2 mm thick PVC edgebanding. The shutters will be swing door type. The storage units will be provided with shelves considering the height. The handles will be stainless steel powder or chromium finish. Levelers will be provided for countering the uneven floor surface and including all necessary fittings. (Make: V2 modular furnitue/ Neon Space, complete all as specified and directed by Engineer in charge.	Sqm	16.00	
12	Removing the existing PVC flooring /carpet etc., including any backing coat and handing over to BEML Ltd and providing and installation of new laminated wooden flooring of of plank size approximate 1200mmx200mm product code: LCF 050/LCF014 AC4 grade, LOC Series not less than 7mm thick, 32 Class, manufactured by Grande of Turkey / Pergo/ Swiss make product or equivalent of approved shade / design / colour with backing layer of 3mm thick thermo foam sheet including necessary end profile, edge beading skirting of required width as per site conditions, including all necessary hardware items etc., complete all as per manufacturer's instructions and as specified & directed by engineer in charge. Note: The rate quoted is deemed to include for a) preparation of the existing floor surface by removing all dust, dirt and making it dry, clean and perfectly level	Sqm	60.00	
13	Supplying & fixing of white Magnatic Writing Board of size 6ftX4ft of seatvik whitelily resin coated of model no: SWM-46M of first quality etc., complete all as specified & directed by Engineer in charge.	Nos	1.00	
14	Supplying & fixing of 4 seater luxurious executive dining table of size approximately 44 inches. The table should be up to 50 inches wide to make it comfortable with teak wood chairs of special & first quality & approved brand, the material shall be of first class royal teak wood with all necessary hardware fittings & fixtures including polishing to dining table & chairs etc., complete all as specified & directed by Engineer in charge.	Set	1.00	
15	CHAIRS-FEATHERLITE MAKE: Supplying of High Back executive chair with head rest, Dual back rest, back rest will be Dynaflex mechanism, Arms height adjustable, Arm Pad standard, leatherette multi-lock mechanism, phumatic gas lift, made of nylon / polypreplene base 26" dia, 50mm nylon castors 5 Nos etc., complete all as specified and directed by Engineer in charge.	Nos	3.00	

16	CHAIRS-FEATHERLITE MAKE: Supplying of Medium Back chairs with back rest with adjustable lumber support, height adjustable Arms synchro mechanism, leatherette, multi-lock synchro mechanism, phumatic gas lift, made of nylon / polypreplene base 26" dia, 50mm nylon castors 5 Nos.etc., complete all as specified and directed by Engineer in charge.	Nos	20.00	
17	CHAIRS-FEATHERLITE MAKE: Providing and supplying of Medium back Chairs of approved brand (Trans steel,featherlite,zodiac , bosq, Eurotech) for visitors but without casters as per approved make and as per instructions of architect etc., complete all as specified and directed by Engineer in charge.	Nos	6.00	
18	SOFA-FEATHERLITE MAKE : - Supplying & fixing of 3 Seater sofa in leatherite finish with SS frame and legscomplete all as specified and directed by Engineer in charge.	Nos	3.00	
19	SOFA-FEATHERLITE MAKE : - Supplying & fixing of single Seater sofa in leatherite finish with SS frame and legscomplete all as specified and directed by Engineer in charge.	Nos	3.00	
20	Supplying & fixing of Teapoy of M/s Featherlite make of Rectangular Chrome Frame with Glass Top of Size: 1200 (W) X 600 (D) X 425 (H) including polishing, acessories etc., complete all as specified and directed by Engineer in charge.	Nos	2.00	
21	Supplying & fixing of Teapoy of M/s Featherlite make of square Chrome Frame with Glass Top Size: 600 (W) X 600 (D) X 425 (H) including polishing, acessories etc., complete all as specified and directed by Engineer in charge.	Nos	4.00	
22	Recliner-Supplying & fixing of high quality luxirous recliner sofa of M/s Featherlite make in leatherite finish with SS frame and legscomplete all as specified and directed by Engineer in charge.	No	1.00	
23	Director table-Supplying & fixing tables of Size: 2700mm x 1050mm x 750mm ht. Work Top: Work top will be made up of 40mm thick pre-laminated boards which will be cut to the customized sizes. 02mm PVC edge-banding will be done at the exposed edges in the through feed machine. The vertical legs will be made up of Metal which will be powder coated and the modesty panel will be made up of 25mm thick PLB etc. Complete. Powder Coating: Seven Tank treatment process with hot Phospating which will be coated to a thickness of 50 microns Levelers: Sturdy levelers are provided for insulation and to counter uneven floor surface. complete all as specified and directed by Engineer in charge. Brand ;- Neon Space / V2 . Contractor to generate Shop drawing and get approve from Engineer in charge.	No	1.00	

		Meeting Table - Supplying and placing in position Modular Rectangular shaped meeting				
	24	table of size 2700mmL x 1200mmW x 750mmH of approved layout/color with electrical plug modules, accessories. Table made up of 25mm thick Prelaminated boards which will be cut to the customized sizes. 02mm PVC edge-banding will be done at the exposed edges in the through feed machine. The vertical legs will be made up of MS powder coated. MS raceways provisoned to accomodate power and data sockets. cables and switches access through Flip lid. Prior to powder coating the raceway covers shall be provided with cut outs of pre-approved sizes (specific to the brand and make of electrical and network plates) located all as specified and directed by Engineer in Charge. Brand - Neon Space / V2. Contractor to produce shop drawing and get approve from Engineer Incharge.	No	1.00		
-	25	Room Table- Supplying and placing in position Modular table of size 900mm dia x750mmH.The vertical legs will be made up of MS powder coated. located all as specified and directed by Engineer in Charge. Make Neon Space / V2 Contarctor to Generate Shop drawing and get approval from Engineer In charge.	No	1.00		
	26	EA TABLE-Supplying & fixing tables of Size: 1800mm x 800mm x 750mm ht. Work Top: Work top will be made up of 25mm thick Prelaminated Particle Board ply with 1mm thick laminated on both side boards with 02mm PVC edge-banding will be done at the exposed edges in the through feed machine. The vertical legs will be made up of Metal which will be powder coated. Powder Coating: Seven Tank treatment process with hot Phospating which will be coated to a thickness of 50 microns Levelers: Sturdy levelers are provided for insulation and to counter uneven floor surface. complete all as specified and directed by Engineer in charge. Brand - Neon Space / V2. Contractor to Generate Shop drawing and Get approval from Engineer In charge.	No	1.00		

	27	PA TABLE-Supplying & fixing tables of Size: 1500mm x 800mm x 750mm ht. Work Top: Work top will be made up of 25mm thick prelaminated particle board ply with 1mm thick laminated on boh side boards with 02mm PVC edge-banding will be done at the exposed edges in the through feed machine. The vertical legs will be made up of Metal which will be powder coated. Powder Coating: Seven Tank treatment process with hot Phospating which will be coated to a thickness of 50 microns Levelers: Sturdy levelers are provided for insulation and to counter uneven floor surface. complete all as specified and directed by Engineer in charge. Brand - Neon Space/ V2. Contractor to Generate Shop Drawing and Get approval from	No	1.00	
\vdash	В	Engineer in charge . CIVIL WORKS			
	28	Earthwork excavation by mechanical/manual means not exceeding 1.50m in width and not exceeding 1.50m in depth in all kinds of soil but excluding hard rock for foundation/ pits including getting out the excavated earth, with a lead upto 50 mts, including dressing of sides, dewatering ground water/rain water, compaction including disposal of debris outside the site premises not exceeding 5KM which is not objected by any civic authorities etc., complete all as specified and directed by Engineer in charge.	Cum	25.00	
	29	Dismantling of the existing brick masonry walls of any description and carting away the debris outside the premises not exceeding 5KM which is not objected by the local civic authorities including all lead, lift, tools, labour etc complete all as specified and directed by Engineer in charge.	Cum	3.00	
	30	Providing & constructing Burnt brick masonry of required thickness in Cement Mortar 1:6 using first class table moulded bricks including necessary curing etc., complete all as specified and directed by Engineer in charge. Note : The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary.	Cu.M	8.00	
	31	Rendering/Plastering 20mm thick in Cement Mortar 1:4 on fair faces of brick or concrete surfaces including finishing the surface smooth and even including curing, tools & tackles at all levels and height etc., complete all as specified and directed by Engineer in charge. Note : - The rate quoted for the item shall deemed to include for providing and removal of scaffolding/staging wherever necessary.	Sqm	60.00	

32	Providing, mixing and laying in position Reinforced Cement Concrete M20 grade of mix proportion 1:1.5:3, using 20mm graded down size granite aggregate for Lintel Beams, etc complete including curing, Vibrating, compacting, finishing, dewatering wherever necessary including lead, lift etc., complete all as specified and directed by Engineer in charge. Note: a) Reinforcement shall be measured and paid separately under relevant item. b) The rate quoted by the Contractor for the item is deemed to include for providing and removal of form work/centering/shuttering wherever necessary.	Cum	2.00	
33	Preparing and complete removal of the existing surface of internal walls by scrapping, sandpapering, removing dust & including providing necessary repairs to cracks and filling the cracks with suitable crack filling compound and applying 2 or more coats of Premium Plastic emulsion paint of approved colour/shade manufactured by M/s. Asian Paints-(Royal Shyne)/Berger Paints-(Silk Glamour Matt or Sheen) over a coat of royal primer and 3mm thick full putty etc., complete all as specified and as directed by Engineer in Charge. Note: The rate is deemed to include for Providing & removal of scaffolding wherever necessary b) Wastages. 3) Removing all splashes, dirt, etc. and leaving premises in a clean state.	Sqm	360.00	
34	Preparing and complete removal of the existing surface of ceilings by scrapping, sandpapering, removing dust & including providing necessary repairs to cracks and filling the cracks with suitable crack filling compound and applying 2 or more coats of Premium Plastic emulsion paint of approved colour/shade manufactured by M/s. Asian Paints-(Royal Shyne)/Berger Paints-(Silk Glamour Matt or Sheen) over a coat of royal primer and 3mm thick full putty etc., complete all as specified and as directed by Engineer in Charge. Note: The rate is deemed to include for Providing & removal of scaffolding wherever necessary b) Wastages. 3) Removing all splashes, dirt, etc. and leaving premises in a clean state.	Sqm	170.00	
35	Dismantling the existing wall panelling consisting of wooden framework, plywood, laminate/veneer sheets of any description including beading, nails, screws etc., complete including segregating and stacking separately the serviceable and unserviceable materials and disposing the unserviceable materials outside the site premises to a distance not exceeding 5.0KM not objected by local civic authorities all as specified and as directed by Engineer in Charge.	Sqm	20.00	

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Supplying and fixining 600mm X 1200mm or approved size of Vitified tiles for wall cladding with 10mm thick, of first quality, approved brand and shade/design, conforming to relevant IS, Manufactured by M/s Kajaria/ Nitco/RAK/Somany/Johnson fixed in cement slurry, over a backing coat of Cement mortar 1:4, 15 mm thick (avg)/based high polymer modified quick-set tile adhesive and curing. The joints shall be neatly finished with matching tile grout and shall be neatly maintained etc., complete all as specified and directed by Engineer-in-Charge. (Basic cost of tiles shall not be less than Rs 100/Sft). Note: The rate quoted for the item deemed to include for all wastages.	Sq.M	20.00		
Dismatling the existing false ceiling (Gypsum board/Grid) including frame work, handing over the aluminium / GI powder coated cut gridwork	Sq.M	145.00		
required thickness & gradient as per site condition and finishing the surface smooth & even including curing etc., complete all as specified	Cu.M	15.00		
Providing and laying in Position Plain cement concrete of mix proportion 1:4:8 using stone aggregate of 40mm down graded granite aggregate, laid in layers not exceeding 15cms well compacted for foundation bed, under floors and other similar works including curing etc.,complete all as specified and as directed by Engineer in charge. Note : The rate quoted for the item shall be deemed to include for providing and removal of centering/shuttering wherever necessary.	Cu.M	3.00		
Demolition/ dismantling the existing cement concrete flooring/hardstanding concrete of any description and in any position not otherwise specifically provided etc and stacking of serviceable materials if any and disposal of unusable materials or debris outside the site premises to a distance not exceeding 5.0 KM not objected by local civic authorities including lead,lift etc,complete all as specified and directed by Engineer in charge. Note: The dismantled materials shall be removed immediately from the premises without disturbing the regular production activities.	Cu.M	12.00		
	with 10mm thick, of first quality, approved brand and shade/design, conforming to relevant IS, Manufactured by M/s Kajaria/ Nitco/RAK/Somany/Johnson fixed in cement slurry, over a backing coat of Cement mortar 1:4, 15 mm thick (avg)/based high polymer modified quick-set tile adhesive and curing. The joints shall be neatly finished with matching tile grout and shall be neatly maintained etc., complete all as specified and directed by Engineer-in-Charge. (Basic cost of tiles shall not be less than Rs 100/Sft). Note: The rate quoted for the item deemed to include for all wastages. Dismatling the existing false ceiling (Gypsum board/Grid) including frame work, handing over the aluminium / GI powder coated cut gridwork and carting away the debries out side the premises to a far off place not objected by any civic authorities etc complete all as specified and directed by Engineer in charge. Providing and laying in Position Plain Cement screed Concrete of mix proportion 1:2:4 in floors and other similar works using 20mm down graded granite aggregate, laid in layers and well compacted, mechanical/manual mixing laid to required thickness & gradient as per site condition and finishing the surface smooth & even including curing etc., complete all as specified and directed by Engineer in charge. Providing and laying in Position Plain cement concrete of mix proportion 1:4:8 using stone aggregate of 40mm down graded granite aggregate of 40mm down graded granite aggregate of 40mm down graded granite aggregate of all septimes including curing etc.,complete all as specified and as directed by Engineer in charge. Note: The rate quoted for the item shall be deemed to include for providing and removal of centering/shuttering wherever necessary. Demolition/ dismantling the existing cement concrete flooring/hardstanding concrete of any description and in any position not otherwise specifically provided etc and stacking of serviceable materials if any and disposal of unusable materials or debris outside the site premises to a di	approved size of Vitified tiles for wall cladding with 10mm thick, of first quality, approved brand and shade/design, conforming to relevant IS, Manufactured by M/s Kajaria/ Nitco/RAK/Somany/Johnson fixed in cement slurry, over a backing coat of Cement mortar 1:4, 15 mm thick (avg)/based high polymer modified quick-set tile adhesive and curing. The joints shall be neatly finished with matching tile grout and shall be neatly maintained etc., complete all as specified and directed by Engineer-in-Charge. (Basic cost of tiles shall not be less than Rs 100/Sft). Note: The rate quoted for the item deemed to include for all wastages. 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Providing and laying in Position Plain cement concrete of mix proportion 1:4:8 using stone aggregate, laid in layers not exceeding 15cms well compacted for foundation bed, under floors and other similar works including curing etc., complete all as specified and directed by Engineer in charge. Demolition/ dismantling the existing cement concrete flooring/hardstanding concrete of any description and in any position not otherwise specifically provided etc and stacking of serviceable materials if any and disposal of unusable materials or debris outside the site premises to a distance not exceeding 5.0 KM not objected by local civic authorities including lead,lift etc, complete all	approved size of Vitified tiles for wall cladding with 10mm thick, of first quality, approved brand and shade/design, conforming to relevant IS, Manufactured by M/s Kajaria/Nitco(RAK/Somany/Johnson fixed in cement slurry, over a backing coat of Cement mortar 1:4, 15 mm thick (avg)/based high polymer modified quick-set tile adhesive and curing. The joints shall be neatly finished with matching tile grout and shall be neatly maintained etc., complete all as specified and directed by Engineer-in-Charge. (Basic cost of tiles shall not be less than Rs 100/Sft). 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Dismatling the existing false ceiling (Gypsum board/Grid) including frame work, handing over the aluminium / GI powder coated cut gridwork and carting away the debries out side the premises to a far off place not objected by any civic authorities etc complete all as specified and directed by Engineer in charge. Providing and laying in Position Plain Cement screed Concrete of mix proportion 1:2:4 in floors and other similar works using 20mm down graded granite aggregate, laid in layers and well compacted, mechanical/manual mixing laid to required thickness & gradient as per site condition and finishing the surface smooth & even including curing etc., complete all as specified and directed by Engineer in charge. Providing and laying in Position Plain Cement concrete of mix proportion 1:4:8 using stone aggregate of 40mm down graded granite aggregate, laid in layers not exceeding 15cms well compacted for foundation bed, under floors and other similar works including curing etc., complete all as specified and as directed by Engineer in charge. Demolition/ dismantling the existing cement concrete flooring/hardstanding concrete of any description and in any position not otherwise specifically provided etc and stacking of serviceable materials if any and disposal of unusable materials or debris outside the site premises to a distance not exceeding 5.0 KM not objected by local civic authorit

41	VITRIFIED TILES FLOORING OVER EXISTING MOSAIC FLOOR INCLUDING SKIRTING & BOARDER TILE: Hacking the existing flooring and Providing and laying premium quality glazed Vitrified tiles over existing mosaic flooring with roff adhesive of size approximately (2'x4') (thickness to be specified by manufacturer), manufactured by M/s NITCO/RAK/Johnson/Kajaria tile adhesive to be made up of M/s BAL ENDURA/ROFF/FOSROC/PIDILITE/LATICRETE with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.as per instructions of architect. (Basic price of tiles shall not be less than Rs.130/Sft). The clear dimension of floor and skirting in Sq. m will be taken for measurement. (Thickness of tiles to be 10 mm as per the instructions of Engineer in charge). The tiles laid after placing electrical conduit over the existing floor etc., complete all as specified & as per instructions of Engineer - in charge.	Sq.M	180.00	
42	Removing carefully the existing aluminium glazed windows viz., aluminium frames, tracks, shutters, glasses and window blinds and handing over to BEML and stacking at a place shown & shifting the material to stores etc., complete all as specified and directed by Engineer in charge. Note: The amount quoted for the item deemed to include for all lead lift, tools, transporation etc.	Sqm	40.00	
43	Removing the existing damaged wooden door frame along with wooden shutters-01 nos each of size 1.0 Mtr X 2.1 Mtr (approx.) and handing over to BEML Ltd, & stacking at a place all as shown & shifting the material to stores etc., complete all as specified and directed by Engineer in charge. Note: The amount quoted for the item deemed to include for all lead lift, tools, transporation etc.	Nos	1.00	
44	Providing and applying water proofing chemical coating for slab using suitable waterproofing compound of first quality approved brand manufactured by M/s.FOSROC/ Roff/BASF/ Dr. Fixit all as per manufacturer's instructions etc., complete as specified and directed by the Engineer-in-charge. Note: (1) Porous concrete surfaces if any to be filled up with PCC 1:2:4 using 6 /10 mm stone aggregate with water proofing liquid compound (2) The bare slab/floor, junction between floor and wall/beam should be finished with cement mortar 1:3 mixed with waterproofing chemical. (3)Work has to done after high spots, dust & cleaning, washing down thoroughly with clean water and drying (4) water leak test should be done by stagnating water.	Sqm	170.00	

45	Dismantling the existing wall tiles/ floor tiles/window cill granite/Mosaic Skirting of any description along with the backing coat and carting away the debris outside the premises not exceeding 5KM which is not objected by the local civic authorities including all lead, lift, tolls, labour etc., complete all as specified and directed by Engineer in charge.	Sqm	60.00	
46	Supplying and fixing glazed ceramic tiles dadoo tiles of size 300mm x 450mm or bigger size of first quality, conforming to relevant IS, Manufactured by M/S. KAJARIA (PREMIUM QUALITY DIGITAL TILES MODEL BOLIVIA LIGHT (T)) or similar shade and colour, quality in M/s.Johnson/ Kajaria/ Nitco/RAK/Somany fixed in	Sqm	50.00	
47	Supplying and laying antiskid ceramic tiles for flooring of size 300mm X 300mm first quality, conforming to relevant IS, Manufactured by M/S. KAJARIA (PREMIUM QUALITY DIGITAL TILES MODEL CEMENTOS DARK) or similar shade and colour, quality in M/s.Johnson/ Kajaria/ Nitco/ RAK/Somany and laid in cement based high polymer modified quick-set tile adhesive in	Sqm	10.00	
48	WPC DOOR SHUTTER & FRAMES FOR TOILETS Providing and fixing factory-made solid Wood Polymer Composite (WPC) single extruded frame of 3" x 2" size having single rebate and provided with 28mm thick solid WPC single extruded door shutter of solid finish fixed with 4" hinges (min 3 Nos). The door frame to be fixed to the walls with holdfasts or bolt fastners (min 4 Nos for	Nos	2.00	

49	Providing & fixing 110mm diameter 6kg/cm2 UPVC pipes manufactured by M/s.Supreme/ Astral conforming to relevant IS for sanitary, waste water, rain water laid in gradient in walls/floors including all standard PVC fittings like elbows, bends, Tees & fixtures such as pipe clips, PVC clamps wooden plug, screws, washers etc fixed/ secured firmly etc.,complete all as specified and directed by Engineer in Charge. Note: The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary.	RMT	12.00	
50	Providing & fixing 75mm diameter 6kg/cm2 UPVC pipes manufactured by M/s.Supreme/ Astral conforming to relevant IS for sanitary, waste water, rain water laid in gradient in walls/floors including all standard PVC fittings like elbows, bends, Tees & fixtures such as pipe clips, PVC clamps wooden plug, screws, washers etc fixed/ secured firmly etc.,complete all as specified and directed by Engineer in Charge. Note: The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary.	RMT	12.00	
51	Dismantling and removing the Concealed water lines, of any description, Water closet, washbasins, plumbing fittings, water & sewage pipes etc from the 01no bathrooms of approx. size 2.60 Mtr X 1.85 Mtr (Approx) and shifting of non usable material, debris outside the premises, carting away & disposal to a far off place not objected by any civic authorities etc., complete all as specified and directed by Engineer in charge and installation of new plumbing lines for water, swege and waste water line to suit the toilet requirement.	Job	2.00	
52	Supplying and fixing new table top hand wash basin (round/oval) size 425x340x175mm (approx) of first quality, conforming to relevant IS, Manufactured by by M/s Jaquar (Model-CNS-WHT-903) /equivalent model & shape in Jaquar including 32 mm diameter brass Chromium plated waste coupling (mode-ALD-CHR-705L130) etc., complete all as specified and directed by Engineer-in-Charge.	Nos	2.00	

53	Supplying and fixing 18 mm thick polished black Granite slab with face double moulding on brick support walls for wash basin & urinal partitions. Granite to be polished on one side for laying on brick support walls and both side polished for urinal partitions jointed neatly with cement mortar and pointed with black oxide or coloured cement compound to match the colour of granite including cutting to template and grinding the edges nosing half round to the slab to fix wash basin & urinal partitions etc., complete all as specified and directed by Engineer in charge. Note: The quoted rate is inclusive of a) cutting the granite to template to fix the wash basin & urinal partitions. b) wastages. c) Brick wall supports will be measured & paid seperately under relevant item.	Sqm	6.00	
54	Cutting holes in brick walls built in cement mortar without damaging the adjacent walls etc, and making good the dismantled portion with cement mortar 1:3 including curing etc., complete all as specified and directed by Engineer in charge.	Nos	5.00	
55	C.I. NAHANI TRAP: Providing and fixing 110mm diameter uPVC floor trap of self-cleansing design with 50mm water seal and with grated SS jali of required size with all necessary fixtures and fittings etc., complete all as specified and directed by Engineer in Charge	Nos	5.00	
56	Supplying & fixing 100mm diameter brass chromium plated grating of first quality & reputed manufacturer conforming to relevant IS etc., complete all as specified and directed by Engineer in charge.	Each	5.00	
57	Supplying and fixing wall mounted European type Water Closet Rimless with concealed flush tank, flush botton, soft closing seat cover and lid, P/S trap, necessary accessories of first quality, conforming to relevant IS, Manufactured by M/s Jaquar (CNS-WHT-959SPP)/equivalent in M/s. Jaquar complete all as specified and directed by Engineer-in-charge. Note: Rate quoted for the item deemed to include for supplying and fixing of MS brackets & rack bolts required for fixing of watercloset.	Nos	2.00	
58	Supplying and fixing new Health faucet with 8mm dia, 1m long Flexible PVC tube with wall Hook of first quality, confirming to relevant IS, manufactured by M/s Jaquar (Model-ALD-CHR-563)/ equivalent in M/s. Jaquar etc., complete all as specified & directed by Engineer-in-charge.	Nos	2.00	
59	Supplying and fixing Brass chromium plated long body Pillar Cock of first quality, confirming to relevant IS, manufactured by M/s Jaquar (Model-FLR-CHR-5021M)/ equivalent in Jaquar etc., complete all as specified & directed by Engineer-in-charge.	Nos	3.00	

60	Supplying and fixing Brass chromium plated Bottle Trap of first quality, confirming to relevant IS, manufactured by M/s Jaquar all as specified & directed by Enginreer-in-charge.	Nos	2.00	
61	Supplying and fixing Brass chromium plated Angular Stop cock (CON-CHR-053KN) of first quality, confirming to relevant IS, manufactured by M/s Jaquar all as specified & directed by Engineer-in-charge.	Nos	2.00	
62	Supplying and fixing Brass chromium plated Soap Dispenser with glass bottle of first quality, confirming to relevant IS, manufactured by M/s Jaquar (ACN-CHR-1135N) all as specified & directed by Engineer-in-charge.	Nos	2.00	
63	Supplying and fixing SS 450mm long Towel Rod of first quality, confirming to relevant IS, manufactured by M/s Jaquar (ACN-CHR-1111BSM) all as specified & directed by Engineer-in-charge.	Nos	3.00	
64	Supplying and fixing Fancy type bathroom corner glass shelf with bracket of first quality, confirming to relevant IS, manufactured by M/s Jaquar (Model-ACN-CHR-1173)/ equivalent in M/s. Jaquar etc., complete all as specified & directed by Engineer-in-charge.	Nos	2.00	
65	LED MIRROR: Supplying & fixing of new oval shaped wall mounted LED Mirror for toilets of Size : 4'X2' approx with lighting systems, switch, mirrors of first quality of M/s Venetian image/Equivalent including all necessary accessories and hard ware items all as specified and as directed by Engineer In Charge.	Nos	2.00	
66	Supplying and fixing vitreous chinaware white wall hung flat back ceramic urinal basin Model: C0583/C0575 (Combo set) of size minimum 380mmx405mmx590mm or bigger the size manufactured by M/s. Parryware/ Hindware/Cera/ including, flush pipe, waste coupling, waste pipe, accessories etc., of reputed manufacturer conforming to relevant IS etc complete set and fixing / bedding urinal against wall in cement mortar 1:2, securing urinal with bolts including brass screws, pointing around urinal back in cement mortar and with all drain outlet fittings.etc., complete all as specified and directed by the Engineer-in-charge.	Nos	2.00	
67	Supplying and fixing heavy duty 125mm Brass Butt Hinges of first quality , conforming to relevant IS etc complete all as specified and directedby Engineer in charge.	Nos	10.00	
68	Supplying and fixing heavy duty 300 mm Brass barrel tower bolts of first quality , conforming to relevant IS etc complete all as specified and directed by Engineer in charge.	Nos	10.00	
69	Supplying and fixing heavy duty Brass Door stopper of first quality , conforming to relevant IS etc complete all as specified and directed by Engineer in charge.	Nos	6.00	

70	Supplying and fixing 300mm dia heavy duty exhaust fans of steel body manufactured by M/s.Bajaj/USHA or equivalent brand conforming to relevant IS etc.,complete all as specified and directed by Engineer-in- charge.	Each	2.00	
71	Supplying & fixing PVC SWR Gully trap 125/110mm of M/s. Supreme / Astral make including jointing with solvent cement.etc., complete all as specified and directed by Engineer in charge.	Each	2.00	
72	Supplying and fixing 200mm antique Brass Mortise lock with Handle of first quality, conforming to relevant IS of reputed manufacturer etc complete all as specified and directed by Engineer in charge.	Nos	6.00	
73	Supplying and fixing Door closer of first quality, conforming to relevant IS, Manufactured by M/s Godrej/Everite/Dorma/Ozone etc complete all as specified and directed by Engineer in charge.	Nos	5.00	
74	Supplying and fixing brass antique door handles of first quality etc., complete all as specified and directed by Engineer-in-charge.	Nos	5.00	
75	Providing & laying in position Fe 500 grade TMT bars in reinforcement conforming to relevant IS in various diameters, locations & levels, cut to length and bent to shape required, binding spirally with MS wire (annealed) of size not less than 0.9 mm dia including all lead, lift, etc., complete all as specified and directed by Engineer in charge. NOTE: a) The rate quoted for the item is deemed to include for cement mortar cover blocks as per the requirement at site and providing and removal of scaffolding/staging wherever necessary. b) Reinforcement will be measured based on actual quantity placed in position on standard weight basis, no allowance will be made for rolling margin. c) Only authorized laps, chairs and spacers shall be measured and paid. d)The contractor shall arrange for testing of TMT bars for physical properties from an authorized agencies as per the relevant IS code. The test reports shall be submitted for our records. e) The TMT bars required shall be procured from the reputed manufacturers confirming to relevant IS specification.	KG	190.00	
76	Supplying and fixing 15mm diameter brass chromium plated Long body bibcock of first quality approved brand manufactured by M/s.Jaquar /Parryware/Hindware/Johnson make including all hardware accessories conforming to relevant IS etc., complete as specified and directed by Engineer in charge.	Nos	2.00	

77	Supplying and Laying the 20mm diameter, heavy grade CPVC water tubing manufactured by M/s.Supreme/Astral/Ashirwad approved make, laid in required length/gradient in walls, flooring & trenches including all standard CPVC fittings such as elbows, collars, Tees, MTA, FTA, PVC Clamps including cutting & making good the floor/walls with cement mortar wherever necessary etc., complete all as specified and directed by Engineer-in-charge. Note: 1) The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary. 2) Removing the existing old water tubings including plumbing items, fittings and handing over to BEML.	RMT	24.00	
С	ELECTRICAL WORKS			
78	Industrial type: Supply, erection, testing and commissioning of factory-made metal clad totally enclosed with cast aluminium housing with industrial socket/interlocked combined rotary switch and socket with scrapping earth connection and plug top (all switches & sockets shall be housed in painted MS boxes). The erection rate shall include supply of angle iron frame work and fixing accessories such as grip bolts / grouting etc. 32 Amps, 2 pole MCB isolator with plug and socket polycarbonate enclosure for UPS incomer and outgoing with IP 44 protection	Each	2.00	
79	SWITCHES AND SOCKET OUTLETS; Industrial type: Supply, erection, testing and commissioning of power points by providing following switches/sockets mounted flush on to the furniture partition wall or fixed to surface or recessed boxes with all fixing and wiring accessories. SITC with following items suitabe for green building energy efficient standard.1 x 20 Amps, 3-pin (250Volts) single phase universal socket with 20 Amps single pole MCB mounted plug and socket board with IP40 accordance with IS 13033, IS8123, IEC/EN 60439-3 configuration shall be round type. From the scope of supply (for AC power).	Each	20.00	
80	SITC with following items suitable for green building energy efficient standard. Plated or powder coated steel/ PVC boxes for fixing the socket 1 x 16 amps 3 pin shuttered modular socket with 16 amps switch mounted on modular plate and box for raw power supply	Each	20.00	
81	SITC with following items suitable for green building energy efficient standard. Plated or powder coated steel/ PVC boxes for fixing the socket 2 x 6 amps 3 pin shuttered modular socket with 2 x 6 amps switch mounted on 6 modular plate and box for UPS workstation power supply	Each	98.00	

82	SITC with following items suitabe for green building energy efficient standard. Plated or powder coated steel/ PVC boxes for fixing the socket 4 x 6 amps 3 pin shuttered modular socket with 2 x 6 amps switch mounted on 12 modular plate and box for UPS workstation power supply	Each	5.00	
	SUB MAINS / CIRCUIT MAINS / POWER WIRING;			
83	Supply and running of 1100 V grade PVC insulated copper conductor (FRLS) wires in 2 mm thick PVC conduits (FRLS). The rate shall include supply and installation of all materials like conduits, wires, fixing accessories etc.			
	32 mm, dia (FRLS) PVC conduit with all accessories.	Meters	50.00	
84	25 mm, dia (FRLS) PVC conduit with all accessories.	Meters	350.00	
85	19 mm, dia (FRLS) PVC conduit with all accessories.	Meters	550.00	
86	Supply & running of 2 x 6sq mm and 1 x 2.5sq mm PVC insulated FRLS copper wires in existing conduits / raceways. FOR RAW POWER	Meters	500.00	
87	Supply & running of 2 x 4sq mm and 1 x 2.5 sq mm PVC insulated FRLS copper wires in existing conduits / raceways. LIGHTING MAIN CIRCUIT	Meters	850.00	
88	Supply & running of 2 x 2.5 sq.mm and 1 x 1.5 sq.mm FRLS copper wires in existing conduits / raceways.	Meters	450.00	
89	directly by switch in switch board shall be measured under the heading SUB-MAINS / CIRCUIT MAINS / POWER WIRING only. Point wiring area with flat / false ceiling: Wiring with 2x2.5 FRLS PVC insulated 1100V grade copper conductor wires and 1 x 1.5 FRLS PVC insulated earth wire in 2mm thick FRLS PVC conduit. Height of ceiling varies from 3.5 to 5.5 meters. A separate neutral shall be run for each circuit.			
	Single light point not more than 7M length controlled by '6 Amps switch.	Each	20.00	
90	Two light point of not more than 13M length controlled by 6 Amps switch.	Each	25.00	
91	Two Way switch controlled by one light point	Each	4.00	
92	Three/4 light points of not more than 15M length controlled by 6 Amps switch.	Each	20.00	
93	5/6 light points of not more than 20M length controlled by 6 Amps switch.	Each	15.00	
94	8/10 light points of not more than 25M length controlled by 6 Amps switch.	Each	4.00	

95	Exhaust fan point with wall-mounted 5A 3-pin socket near fan location and 10 Amps single pole controlling switch located independently. The rate shall also include supply of 5 Amps 3 pin plug top.	Each	4.00	
96	LIGHT FIXTURE / CEILING / EXHAUST FANS; Supply, Store, Erection of Lighting Fixture: Supply, Erection and testing and commissioning the following light fixtures complete with all accessories.			
	SITC 9 W LED round light recess mount suitable for false ceiling Alluminium diecost polycorbonate body 230 v i/p white fixtures of (PHILIPS, BAJAJ, HAVELLS, WIPRO, any reputed make / brands	Each	50.00	
97	SITC 22 W LED SQUARE /round light recess mount suitable for false ceiling Alluminium diecost polycarbonate body 230 v i/p white fixtures of (PHILIPS, BAJAJ, HAVELLS, WIPRO, any reputed make/ brands)	Each	95.00	
98	SITC 1 X 18 W LED round light recess mount suitable for false ceiling Aluminum diecast polycarbonate body 230 v i/p white fixtures of M/s (PHILIPS, BAJAJ, HAVELLS, WIPRO, any reputed make/brands)	Each	4.00	
99	SITC 1X 25 W LED 2 X 2 SQUARE light recess mount suitable for false ceiling Alluminium diecost polycorbonate body 230 v i/p white fixtures of M/s (PHILIPS, BAJAJ, HAVELLS, WIPRO, any reputed makes/brands)	Each	125.00	
100	SITC OF LED STRIP LIGHT WITH WATER PROOF COVRING Technical data • Rated voltage: 12V DC • Power consumption: 20W/m • Luminous efficiency: 6-7lm/LED • Number of LEDs: 2X120pcs/m • LED type: SMD3528 20 MTR STRIP WITH SUTABLE DRIVE FOR THE SAME	Each	8.00	
101	SITC OF 300 mm impeller dia, 1400 rpm exhaust fan (1- phase) 5 blades, whose aerodynamic design ensures a greater amount of air circulation and are attached in a balanced structure. The sweep size is 300mm for this aesthetically appealing product. (HAVELLS/ BAJAJ/ USHA/ ALMONARD)	Each	4.00	
102	POWER EARTHING SYSTEM; Earthing Stations Providing the earth stations with necessary materials, labour, civil works etc. as per Indian Standard specification IS:3043 etc. complete.			
102	Supplying & Fixing of 3 Mtrs long 50 mm dia. GI Pipe electrode earth station. plate. The identification number shall be provided both inside and outside.	Each	2.00	
103	Supplying & Fixing of Earthing Flats / Wires : Supplying & Fixing of 25x3 mm GI R tape with sleeves.	Mtrs	10.00	
104	Supplying & Fixing of 8 SWG Copper wire	Mtrs	10.00	

105	Supplying & Fixing of 6 SQ MM GREEN Copper wire with FRLS insulation.	Mtrs	25.00	
106	pipes: Supply and laying of 25 MM diameter GI pipes in wall / floor / in ground including chipping/excavation/Road cutting laying and making good the surface as required. Any collars and bends and nipples required shall be laid at a depth of 900 mm below ground level or under paved areas / under floor as required.	Mtrs	50.00	
107	SITC OF FLOOR JUNCTION BOX OF HEIGHT 25 MM 50 X 50 MM SIZE WITH COVER	Nos	25.00	
108	SITC OF FLOOR ALUMINIUM RACE WAY FOR ELECTRICAL WORKS OF HEIGHT 50 X 50 MM SIZE WITH COVER	Mtrs	150.00	
109	Cutting of floor for laying conduits for LAN / Telephone system of size required at site, and may good by providing chicken mesh and rough plastering.	Cu.M	50.00	
110	PA SYSTEM FOR CONFERENCE ROOM:	Mhua	200.00	
110	Supply and fixing of Cat 6 cable for data ports	Mtrs	200.00	
111	Supply and fixing of RECESS MOUNT CEILING SPEAKER BOSH	Nos	10.00	
112	Supply and fixing of AMPLIFIER AND MIKE FOR ANOUNCEMENT SET	Nos	1.00	
D	AC WORKS			
113	VRF System, Outdoor units Supply of Full inverter based cooling only variable refrigerant flow (VRF) units with DC twin rotary modular type air conditioning system suitable for cooling only with inverter type compressor in each module of outdoor unit & complete with indoor & outdoor individual controller & fittings as per quantity below including full charging of R410A refrigerant gas. Units shall consist one or multiple Outdoor units and combination of indoor units , each having capability to cool independently for the requirements of the rooms. The outdoor unit shall be factory assembled unit housed in a sturdy weather proof casing. Make of indoor & outdoor units-M/s. Daikin. Capacities shall be as follows: ODU 18 HP (RXQ18ARY6)	No	1.00	
114	Supply of VRV Cassette type indoor unit: 3.2 TR (FXFSQ100ARV16)	Nos	2.00	
115	Supply of VRV Cassette type indoor unit : 2TR (FXFSQ63ARV16)	Nos	3.00	
115		Nos No	1.00	
	2TR (FXFSQ63ARV16) Supply of VRV Cassette type indoor unit :			
116	2TR (FXFSQ63ARV16) Supply of VRV Cassette type indoor unit : 1.3TR (FXFSQ40ARV16) Supply of VRV Cassette type indoor unit :	No	1.00	

	Supply, Installation, pressure testing, vaccumisation and commissioning of VRF ODU of following capacity: ODU 18HP			
120	Lifting and shifting of outdoor units to the installation Location - Lifting Equipment/Crane Charges	Nos	1.00	
121	VRF INSTALLATION - INDOOR UNIT & Controllers: Installation of Cassette type Units of the following capacities:	Nos	2.00	
	3.2 TR (FXFSQ100ARV16)			
122	2TR (FXFSQ63ARV16)	Nos	3.00	
123	1.28TR (FXFSQ40ARV16)	No	1.00	
124	0.8 TR (FXFSQ25ARV16)	No	1.00	
125	Installation, Testing & Commissioning of Refnet Joints, T joints- Make M/s. Daikin	Nos	8.00	
126	Additional gas charging for the entire length of copper tube - Refrigerant R410A / Environmental friendly refrigerant.	Kg	20.00	
127	REFRIGERANT PIPING FOR VRF unit: Supply, Installation, Testing and Commissioning of refrigerant copper piping suitable for R410A refrigerant. The Ref. Piping shall be pressure tested at 1.5 times the working pressure. The Piping shall be properly supported at every 2 m distance with bracket and supporting rods etc.,19 mm / 13 mm thick Nitrile rubber tubular Insulation	RMT	90.00	
128	Supply, laying, testing and Commissioning of unarmoured communication cables between outdoor units to indoor units and from Outdoor units: 1.5 sq.mm 2 core cable (with PVC Conduit)	RMT	90.00	
129	Supply, laying, testing and Commissioning of unarmoured power cable for VRF IDU: 2.5 sq.mm 3 core cable	RMT	30.00	
130	Supplying & Installation of Polycorbonate stand with rubber pad & accessories etc., complete all as specified & directed by Engineer in charge.	Set	1.00	
131	Supplying and Laying the 25mm diameter, heavy grade CPVC water tubing manufactured by M/s.Supreme/Astral/Ashirwad approved make, laid in required length/gradient in walls, flooring & trenches including all standard CPVC fittings such as elbows, collars, Tees, MTA, FTA, PVC Clamps including cutting & making good the floor/walls with cement mortar wherever necessary etc., complete all as specified and directed by Engineer-in-charge. Note: 1) The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary. 2) Removing the existing old water tubings including plumbing items, fittings and handing over to BEML.	RMT	15.00	

132	Supplying and Laying the 32mm diameter, heavy grade CPVC water tubing manufactured by M/s.Supreme/Astral/Ashirwad approved make, laid in required length/gradient in walls, flooring & trenches including all standard CPVC fittings such as elbows, collars, Tees, MTA, FTA, PVC Clamps including cutting & making good the floor/walls with cement mortar wherever necessary etc., complete all as specified and directed by Engineer-in-charge. Note: 1) The rate quoted is deemed to include for providing and removal of scaffolding/staging wherever necessary. 2) Removing the existing old water tubings including plumbing items, fittings and handing over to BEML.	RMT	30.00	
133	Supplying & fixing of Indoor Power Socket of first quality confirming to relevant IS with all necessary acessories etc., complete all as specified and directed by Engineer in Charge.	Nos	7.00	
E	NETWORKING WORKS			
134	Supply & Installation of Information outlet (cat- 6) of first quality etc., complete all as specified and directed by Engineer in Charge.	Nos	25.00	
135	Supply & Installation of 7ft patch cord (cat-6) of first quality etc., complete all as specified and directed by Engineer in Charge.	Nos	20.00	
136	Supply & Installation of Numbering ties of first quality etc., complete all as specified and directed by Engineer in Charge.	Nos	25.00	
137	Supply & Installation of Face plate of first quality etc., complete all as specified and directed by Engineer in Charge.	Nos	25.00	
138	Miscellaneous expenses (gatta, screw, ferrules, tap)	Lumpsu m	1.00	
139	Supply and fixing of Cat 6 cable for data ports of first quality etc., complete all as specified and directed by Engineer in Charge.	meters	600.00	
140	Supply and laying of 19 mm conduit for data cabling first quality etc., complete all as specified and directed by Engineer in Charge.	meters	600.00	
141	Supply and installation of 3 module PVC box first quality etc., complete all as specified and directed by Engineer in Charge.	Nos	25.00	
142	Supply & Installation of 24 Port unloded patch panel first quality etc., complete all as specified and directed by Engineer in Charge.	Nos	1.00	
143	Supply & Installation of 1'U'Cable manager first quality etc., complete all as specified and directed by Engineer in Charge.	Nos	1.00	
144	Supply & Installation of12'U'Rack with power stripper -01no and hardware first quality etc., complete all as specified and directed by Engineer in Charge.	Nos	1.00	

145	Supply & Installation with testing and comissioning of 24 port switch first quality etc., complete all as specified and directed by Engineer in Charge.	Nos	1.00	
	Total value of work excluding GST (Rs).			
	GST (Rs).			
	Total value of work inclusive of GST (Rs)			
	Note			_

- 1) The rate quoted for the above items is deemed to include for providing and removal of scaffolding/staging wherever necessary.
- 2) The contractors/ prospective bidders shall visit the site and acquaint themselves with the site conditions before submission of bid/ quote.
- 3) The contractor to note that the dismantled materials should be removed and shifted immediately from the site premises without disturbing the regular office atmosphere in the area and the rate is deemed to include for the same.
- 4) L-1 Contractor to whom the contract is awarded is requested to submit the drawings, 3D Visualisation of proposed Upgradation work of D (R) Office.

(Total Amount in words Rupees	
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Signature of the Contractor with seal