

1. FLOORING

SI No	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED
1.01	Vitrified Tile Flooring Supply and laying of vetrified tiles (TILE @125/sft) (tile of size 3' x 3') Supply and laying of vetrified tiles of size 2' x 2' (Rs.75/- per sft)	
1.02	Carpet Tiles Laying of Carpets to approved pattern as per detail drawings this includes covering with polythene sheets and shampooing it before hand over. Tiles cost Rs.110/sft	
1.03	False Flooring Providing and fixing access flooring 2' x 2' 450mm high with anti-static laminated finish, above the existing floor to support the server racks, all complete as per manufacturers specifications in the server room.	
1.04	Anti- Static Flooring Supply and fixing of anti-static vinyl flooring	
1.05	Wooden Flooring	
1.06	Skirting Skirting - Providing and fixing 4" laminated skirting with 1/2" thk. MDF with 1.00mm laminate. 1/4" TW lipping to be fixed to on top of skirting and polished to desired shade.	
1.07	Vitrified Tiles Skirting	
1.08	Wooden Flooring Skirting	

2. CEILING

SI No	Description	SPECIFICATION CONFIRMED/ NOT CONFIRMED
2.01	<p>Gypsum false ceiling with Cove Lighting</p> <p>Providing and fixing Cove lighting bracket in gypsum false ceiling using 12mm gyp boards with GI framework as per detail at locations indicated in the drawing with all other specifications same as above.</p> <p>Providing and fixing plain gypsum false ceiling using 12mm gyp boards with GI framework as per detail at locations indicated in the drawing with all other specifications same as above.</p>	
2.02	<p>Modular Grid Ceiling</p> <p>Supplying and installing of Armstrong Make grid ceiling using acoustic ceiling tiles in a an exposed metal grid. Grid members to be of galvanised steel to BS 2989Z-181 zinc coating. The grid system shall be of standard 600mm x 600mm module of 24mm table precision made to within plus or minus 0.25mm systems , to consist of main runner and cross tees .Should be fitted with " Quick release High Speed steel Clips" and Designed to satisfy ASTM C635 loading and deflection criteria. The main and cross runners to be provided with Bayonet Couplings for quick installation.</p> <p>Modular Ceiling Tiles. The ceiling tiles should be of mineral fibre with regular/ irregular fissures/perforations. Should offer min NRC of .55 and Rh of 95%. The minimum thickness of tile should be 15mm with flat square edges. Cost of all cutouts for Electrical ,AC diffusers/ grills should be included. The cut tiles can be charged as full tiles where size is more than 300mm but cost of tile will be deducted in area where light fixtures or diffusers of 600mm x 600mm is accomodated in a grid.</p>	
2.03	<p>Wooden False Ceiling</p> <p>Providing and fixing of wooden false ceiling constructed with timber frame work fixed with 18mm thick MDF/ plywood and the surfaces finished with lamination. The ceiling supports to be suspended from the ceiling with necessary hardware in CEO cabin and Board room.</p>	

3. PARTITION & PANELLING	
	General Specifications for Carpentry Joinery
(i)	All MDF/block board samples to be approved before procurement.
(ii)	All exposed block board to have wood (recycled wood with FSC certification) lipping.
(iii)	All wood (recycled wood with FSC certification) to be well seasoned.
(v)	All MDF to be only of MDF make or equivalent. List of Suppliers attached.
(vi)	Grooves to be provided at intersection of all separate surfaces such as wooden (recycled wood with FSC Certification) skirting and
(vii)	Partitions and panelling to be paid for only upto false ceiling. All necessary frame work required for anchoring partition above into slab
(viii)	Grooves to be provided at junction of partition, panelling, fixed tables 19mm - 25mm as required for carpet to slide in. No extra cost to
(ix)	All hardware to be in brass. Hinges of make Magnum, Earl-Bihari, Innofit, Haffele to be considered SOS hinges to be considered.
(x)	Inside of all drawers to have 1mm thk.laminate of Greenlam, Virlaminate or Alphaica make/Deco Plus.
(xi)	Prelaminated board (Eco board/rapidly renewable wood) 12mm thickness may be considered for drawers with no cost difference.
(xii)	All extra frame work required within partitions and panelling for supporting of A.C.grills, fixing of skirting etc.and all such allied
(xiii)	Skirting in MDF with finishing material on carpentry items to be included in the cost of carpentry items.
(xiv)	Wooden skirting (recycled wood with FSC Certification) over brick, siporex, or columns or partitions with gypsum board only to be paid
(xv)	Drawing indicate only tentative locations and quantity of grooves, inlay pattis, pattas, etc. Actual execution as per instructions of
(xvi)	Grooves and inlays also to be of veneer or laminate not to be paid for seperately
(xvii)	Instead of wood the frame work material may also be Aluminium section of 50mm x 25mm size and in the same grid work at no extra
(xviii)	All grooves of all thickness, inlay pattis & extra pattis in partitions, panellings and on tables to be included in quotations and no extra
(xix)	Pattas upto 150mm thickness not to be paid for separately. Only in cases where ply exceeding 150mm width has to be fully put over
(xx)	Special attention to be paid to anchorage & line & level at junctions of partitions & storage cabinets so as to produce surfaces flush
(xxii)	All veneer to be straight grooved, horizontal, vertical or bookmark as per Architect's instructions. No extra cost to be paid towards grain
(xxiii)	Grooves in veneer of all sizes not to be measured separately. To be part of broad measurements.
(xxiv)	FOR ALL VENEER OR WOODEN FINIHES MELAMINE TO BE CONSIDRED .

3. PARTITION & PANELLING

SI No	Description	SPECIFICATION CONFIRMED/ NOT CONFIRMED			
3.01	Full Height laminate Partition Providing & fixing 12mm ply on framework made of 2"x1" Aluminium section with 2'0" spacing as above with 1mm thk laminate over 4mm ply or as directed by the architect with Glass wool filling .Laminate as per design to be fixed on plywood ,woth grooving etc as per design.				
3.02	Full height Veneer Partition Providing and fixing of backdrop partition in reception with veneer / frosted glass, etc. as per design including partition on left wall and front partition on either side of main entrance door.(Excluding cost of signage / name board.				
3.03	Patch Fitted Partitions with all necessary accessories				
3.04	Pelmet for windows Providing and fixing 19mm ply ,finished with paint 6" X 6". To fis window blinds				
3.05	Pelmet for Projector Screen Providing and 19mm ply and finished with paint 9" X 6".				
3.06	Masonry Wall 9" Masonery wall complete with plastering and finishing.				
3.07	Above Ceiling Partition Providing and fixing of solid partition above the ceiling up to roof , specification as per solid gypsum partition with glass wool ,without paint				
3.08	Partitions in the Concept Room Providing and fixing of curved partition as per layout with laminated surface .				
3.09	Partitions in the Concept Room for LCD Panels Providing and fixing of partition as per layout with laminated surface to mount the LCD panels				

SI No	Description	SPECIFICATION CONFIRMED/ NOT CONFIRMED			
3.10	Column Cladding Providing and fixing of column panelling constructed with frame work cladded with MDF & finished with 1mm lamination.				
3.11	Veneer Panelling Providing and fixing Veneer panelling using 12mm plywood with 4mm Veneer of approved shade and quality. Veneer to be pressed without using nails and polished to desired shade and sprayed with melamine. Panelled surface to be provided with grooves as per design. Basic rate of Veneer Rs.65/sft				
3.12	Duco Panelling Providing and fixing designer MDF panel as per design , finished with duco paint.				
3.13	White Board - Glass (I) Fabricating & fixing writing boards of 12 mm th glass with vinyl back of white colour held on the wall surface with fabricated steel Struts to hold in place also to be created a pelmet and bottom frame work to create a pen tray, necessary accessories .				
3.14	Soft Board Panelling on both sides(double thickness) Providing & Fixing soft board panelling over adequate levelled frame, formed of 12mm thick Softboard in approved fabric (Basic cost Rs.180/m) with Beech/Teak wood beeding of 40mm x 40mm				

4. DOORS		
SI No	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED
	General Specifications All floor springs, patch fittings and door closers to be of 'Dorma' make. Veneer on shutters to be 4mm thk and finished in melamine polish. Laminate to be 1.5mm thk of approved colour and make. Glass for partly glazed shutters to be 10mm thk float glass fixed with wooden beading as per detail drawings. Toughened glass for fully glazed shutters to be 12mm thk Shutter shall be of approved make and model Cost of other fittings to be included in the above cost including Cylindrical lock - Doorset make, Handles-Dorma make. Wooden frames for doors where required to be of size 4" X 2-1/2" and to be finished with melamine polish as approved.	
4.01	Framed Laminated Solid Doors .	
	Providing and fixing framed vision panel door as per details. Wooden frame of min section 75mm x 50mm with chamfered edges and grooves and necessary rebate to accommodate shutter.Frame to be screw fixed to the partitions. Shutters to be fabricated out of core flush doors of 25mm thickness, laminated on both sides and edge bounded with 12mm thick matching wooden lipping beeding. Brushed steel handles to be provided along with brushed steel hinges , dead lock , door closure , door stopper of approved make and model.	
	3'0" x 7'0"	
	2'6" x 7'0"	

4.02	Framed Laminated Doors with Vision Panel.	
	<p>Providing and fixing framed vision panel door as per details. Wooden frame of min section 75mm x 50mm with chamfered edges and grooves and necessary rebate to accommodate shutter. Frame to be screw fixed to the partitions. Shutters to be fabricated out of some solid core flush doors of 25mm thickness, laminated on both sides and edge bounded with 12mm thick matching wooden lipping beeding. 8mm thick glass panel required size and profile to be fixed with 12mm thick wooden beading as per dwg. Brushed steel handles to be provided along with brushed steel hinges , dead lock , door closure , door stopper of approved make and model.</p>	
	3'0" x 7'0"	
4.03	Toughened Glass Doors(dorma patch fitting)	
	<p>Providing and fixing single/double leaves shutter made of 12mm toughened glass of approved make, supported on brushed finished stainless steel top and bottom hung on required type of patch fittings with heavy duty Floor spring of approved make. The glass panel edges shall be properly machine polished. The 60% of glass shall be fixed with approved make of vinyl film for frosted/ etched effect to the pattern as indicated in the detail drawings. The door shall be fixed with necessary hardware like handles, Door stopper, Patch lock, PVC gasket etc of approved make as recommended by Architects.</p>	
	Toughened Glass Main doors3'6" x 8'0"	
	with fixed side panel- 4'0" x 8'0"	
	Cabin Doors - 3'0" x 7'0"	
	Cabin Doors - 4'0" x 7'0"	
4.04	Steel Portal	
	<p>Supply and fixing of 1.5" SS pipes brushed steel finish on the inner side of all glass partitions , fixed to the height of 4" from ground.</p>	

5. FURNITURE & STORAGES

SI No	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED
5.00	FURNITURE	
	<p>General Specifications : All hardware including handles, hinges, locks, sliding channels, castors etc. to be of approved make and finish as per instructions of the Architect.</p> <p>All exposed surfaces of Commercial Block board to be finished with 1.5 mm thk. Laminate of approved shade and finish. All internal surfaces to be finished with 1 mm thk. Laminate of approved shade and finish, or with approved balancing laminate in case of prelaminated MDF. All completed as per the instructions of the Architect.</p> <p>All exposed edges of the boards to be finished with PVC lipping of approved finish & thickness. All complete as per instructions of the Architect. Basic Rate of veneer - 70 INR</p>	
5.01	Reception table Table finished in Duco and glass butchwork on mirror cladding as per drawing with provision for recess lighting ,includes one storage unit of three drawers, key board tray etc. & 12mm glass top	
	6'6" x 2'6" x 2'6"	
	Side Credenza - 3'0" x 1'6" x 2'6"	
5.02	Conference table Fabricated as per design out of 19mm commercial board with 4mm Veneer of approved quality and brand.Provided with matching wooden beeding on the side of table top.Provided with openable cable bins and wire managers on table top as per design to access the cables.Table to be polished to desired shade finished with PU coating.	
	8'0" x 4'0"	
	7'0" x 3'0"	
5.03	Vedio Conferencing Table Fabricated as per design out of 19mm commercial board with 1.5mm Laminate of approved quality and brand.Provided with matching wooden beeding on the side of table top polished /painted to match the top.Provided with openable cable bins and wire managers on table top as per design to access the cables.	
	15'0" x 2'0" x 2'6"	
5.04	DDG's Table - Veneer Finish as per design Fabricated as per design out of 19mm commercial board with 4mm Veneer of approved quality and brandand Glass where required.Provided with matching wooden beeding on the side of table top.Provided with openable cable bins and wire managers on table top as per design to access the cables.Table to be polished to desired shade finished with PU coating.	
	Table - 9'0" x 3'6" x 2'6"	
	Side Credenza- 5'0" x 1'8" x 2'6"	
	Back Credenza- 7'0" x 1'6" x 2'6"	

SI No	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED
5.05	Chairmans Table- Veneer Finish as per design Fabricated as per design out of 19mm commercial board with 4mm Veneer of approved quality and brand and Glass where required. Provided with matching wooden beeding on the side of table top. Provided with openable cable bins and wire managers on table top as per design to access the cables. Table to be polished to desired shade finished with PU coating.	
	Table - 8'0" x 2'6" x 2'6"	
	Side Credenza - 5'0" x 1'6" x 2'6"	
	Back Credenza- 7'0" x 1'6" x 2'6"	
5.06	Guest Room Fabricated with 19mm Plwood finished with Teak wood veneer as per design to have storage below for stocking linen. Provided with 6" kurlon mattress. Finished with polish and melamine spray.	
	Cot with Head board- 6'0" x 6'6"	
5.07	Side Table - 1'6" x 1'6" x 1'6"	
5.08	Writing Table - 8'3" x 1'9" x 2'6"	
5.09	Mirror fixed brushed steel studs- 3'6" x 2'6"	
5.10	Wardrobes - 2'0" x 7'0" x 2'0"	
5.11	Luggage Table - 3'6" x 2'0" x 2'0"	
5.12	Corner Tables - 18" x 18"	
	Centre Table - 3'6" x 2'0"	
	STORAGES	
	<p>General Specifications</p> <p>All hardware including handles, hinges, locks, sliding channels, castors etc. to be of approved make and finish as per instructions of the Architect.</p> <p>All exposed surfaces of MDF/particle board (prelaminated eco-board/rapidly renewable wood) to be finished with 1mm thick laminate of approved shade & finish. All internal surfaces of ply/particle board to be finished with 1mm thick laminate of approved shade and finish or with approved balancing laminate in case of prelaminated particle board. All complete as per the instructions of the Architect.</p> <p>All exposed edges of MDF/particle board (prelaminated eco-board/rapidly renewable wood) to be finished with PVC lipping of approved finish and thickness. All complete as per instructions of the Architect.</p> <p>Rate to include all requisiet grooves of dimensions as indicated by the Architect at site whether or not incorporated in the drawing or its bills of quantities.</p>	

SI No	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED
5.13	Low Height Storage Vannered Cabinets Fabrication of low height storage of 30" ht. as per details & specs of LHS. 4mm Veneer on the outter surface and 1mm laminate on the inner surfaces. Exterior duely polished and finished with Melamine spray. necessary accessories like brass hinges, ball catchers, tower bolts, locks, handles, etc., as directed by the architect. Provide one adjustable shelf cupboard depth of 16 ".	
	4'0" x 1'6" x 2'6"	
5.14	Low height laminate storages (pantry) Storage finished in 19mm ply finished in laminate 24" depth 30 height, to have drawers and storage shelves. Below counter cabinets to be provided with 20mm granite on top with front surfaced to be bull nosed.	
	Over head Cabinets - 7'6" x 2'6" x 1'0"	
	Below Counter Cabinet - 7'6" x 2'9" x 2'0"	
	Below Counter Cabinet - 10'0" x 2'9" x 2'0"	
5.15	Full Height storage Storage finished in 19mm ply finished in Laminate 18" depth	
5.16	DB Cabinet Providing and fixing DB Cabinets of 450mm deep made in 19mm thick plywood and finished in veneer of approved shade as per the detailed drawings. The DB cabinet shall have shutters made in 19mm thick plywood and finished in veneer of approved shade with cut-outs to accommodate aluminium powder coated louvers as per the detail drawings. All the exposed plywood surface shall be finished in veneer with matching timber lipping. The internal surfaces of the cabinet shall be finished in 1.0mm laminate with timber edge lipping. All the exposed wooden and veneer surfaces shall be stained to shade as directed by Architects and finished in water based Melamine coat with approved texture. This also includes providing necessary hardware like handles, hinges, tower bolts/ball catches, locks etc. as per the detail drawings.	

6. WALL FINISHES

SI No	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED
6.01	To prepare & finish 3 coats of acrylic emulsion paint of approved quality & shade by sand papering the surface, applying one coat of primer, prepare the surface with two coats of full putty, sand papering again, repeating a coat of primer, applying one coat of plastic emulsion paint, touching up with putty & applying two final roller coats of plastic emulsion paint, to internal wall/ceilings masonry concrete surfaces incl. preparing the surface by cleaning scrapping, smooth filling crevices,scaffolding etc.(Painting works to be certified by the supplier and certificate for the same has to be submitted after finishing) Non Lead based	
	Ceiling	
6.02	To prepare & finish 3 coats of LUSTER (Washable) paint of approved quality & shade by sand papering the surface, applying one coat of primer, prepare the surface with two coats of full putty, sand papering again, repeating a coat of primer, applying one coat of luster paint, touching up with putty & applying two final roller coats of luster paint, to internal wall/ceilings masonry concrete surfaces incl. preparing the surface by cleaning scrapping, smooth filling crevices,scaffolding etc.(Painting works to be certified by the supplier and certificate for the same has to be submitted after finishing) Non Lead based	
	Walls	
6.03	Providing and Applying Textured paint (VOC content for non-flat paints - 150 g/l and VOC for flat paints - 50 g/l) of approved make & shades to walls / partitions including surface preparation, as per manufacturers specifications etc. All complete as per Architects instructions and specifications. Non Lead based	
	Walls	
6.04	POP wall punning Providing and applying 12mm thick plaster of paris to the walls and columns in plumbline and level including scraping & making grooves. After levelling surface to be finished to receive paint/wall paper, etc.	
6.05	Wall Paper Providing and fixing of wall paper on existing vertical surface. basic rate Rs. 120 per sft.	

7. MISCELLANEOUS

SI No	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED
7.01	Dry Landscaping Providing landscaping in the reception with bamboo, water body, pebbles, plants, etc. and pebbles in the work area as per detail	
	Reception Area	
	DDG's Cabin	
7.02	Graphics Providing and fixing in position approved make of vinyl, laminated graphics(180c film) as directed by the Architects and as per the detail drawings. The basic price digital laminated vinyl graphics shall be considered as Rs.225/- per Sft Inclusive of all taxes. Cabins and General Area Concept Room	
7.03	Frost Film frost film on glass surfaces with approved design	
7.04	Window Blinds Blinds (Vista make adhering to vista specifications) 100mm wide vertical blinds of vista make Black out blinds	
7.05	House keeping and Debris Clearing on a daily basis till handing over date including acid washing etc	
7.06	Steel Gripper pattis Supply and installation of SS gripper pattis of length 4 feet. To be fixed between where ever the vitrified, marble, vinyl etc touches the carpet.	
7.07	Aesthetics picture frames, planters with planter boxes etc.	

8. SIGNAGES

SI No	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED
8.01	Unique Identification Authority of India is made up of 20mm thick ss letters "U" letter height is 12" & other letters are proportionate.	
8.02	DISCUSSION ROOM, VEDIO CONFERENCING ROOM,BIOMETRICS LAB,CONCEPT ROOM,TRAINING ROOM & DATA & QUALITY CENTRE ROOM, NAMES ON THE CABIN .It is made up of Aluminum curved frame on that dully DuPont painted, with inner name computer cut vinyl letters as per given. Size of 65mmX 229mm.	
8.03	TOILET SIGNAGES	
8.04	FIRE EXIT. Double Sided, It is made up of 3mm PVC on auto glow is pasted for back ground. On that computer cut vinyl letters are pasted as per international standard. Size of 6X16".	
8.05	FIRE EVACUATION MAPS. It is made up of 3mm clear acrylic (sandwich type) with laser print on paper .Fixing with steel stud. Size of	
8.06	EMERGENCY EXIT, in 3mm PVC on that computer cut vinyl reflective letters are pasted.6X16	
8.07	Fire extinguisher It is made up of a "V" shape in 3mm pvc on that 2hrs night glow pasted. Computer cut vinyl letters are pasted. Size of 6X13".	
8.08	Pull& push Glass Door stickers in aluminium embossing	

9. MODULAR		
SI No	Description	SPECIFICATION CONFIRMED/ NOT CONFIRMED
9.00	Modular Furnitures	
	Workstations	
9.01	L Type Workstation 5'0" x 4'6" - hgt 4'0" table top- 1'9"	
9.02	Linear Workstations 4'0"w-hgt 4'0" table top depth - 1'9"	
	<p>Specification:</p> <p>Partition - 50mm Slide based of 1200Ht, finished with Fabric above & Laminate below table top with one Marker Board and Magnetic Board Tile.</p> <p>Table top - 25mm thick pre laminated particle board finished with 2mm edge lipping finish.</p> <p>Understructure - Gable End and fitted with suitable brackets wherever required.</p> <p>Wire Management - Provision for Electrical BTT & Skirting racway for wiremanagement is considered.</p>	
9.03	Cabin Tables	
	Main Table – 6'0"W x3'6" x 2'6"D x 2'6"H	
	Main Table – 5'0"W x 3'6"x 2'6"D x 2'6"H	
	Back Credenza - 8'0" w x 1'6" x 2'6" (sliding shutters)	
	<p>Specification:</p> <p>Table top - 25mm thick pre laminated particle board finished with 2mm edge lipping finish.</p> <p>Understructure - MS Leg and Modesty panel with MS Corner Post.</p> <p>Wire Management - BI Level MS Raceway Is Considered.</p>	
9.04	Bio Metric Lab	
	Table - 3'0" w x 2'0" d x 2'6" d	
	<p>Running Counter - 12'6"x 2'6" x 2'6"</p> <p>Specification:</p> <p>Table top - 25mm thick pre laminated particle board finished with 2mm edge lipping finish.</p> <p>Understructure - MS Lag and Modesty panel with MS Corner Post.</p> <p>Wire Management - BI Level MS Raceway Is Considered.</p>	
9.05	Mobile Pedestal - (2D+1F) - 400W x 467D x 705ht.	
	Pedestal are made of 18 mm PLB with two drawer units and one filing unit. The drawer boxes are palced on roller slides. The pedestal units are made mobile with the use of castors.The drawer units are provided with suitable locks and recessed handles.	
9.06	ABS Keyboard Tray with Mousepad	
	ABS Keyboard tray without mouse pad is made of Acrylonitrile Butadiene styrene Martial is a common thermo plastic. The keyboard is a pullout type, fixed to channels and screwed to below table top	
9.07	Cpu Trolley	

SI No	Description	SPECIFICATION CONFIRMED/ NOT CONFIRMED
9.08	Conference Table Fabricated as per design Table consist of the followings: Free standing "L" Type Table with 25 mm thick Post formed. laminated top provided with 18mm thick leg and modesty panel	
	5'0" x 2'3" x 2'6"	
	8'6" x 2'3" x 2'6"	
	7'6" x 2'3" x 2'6"	
	6'3" x 2'3" x 2'6"	
9.09	Pantry Table MS Frame, Powder Coated, Height Adjustable Levellers for All Four Legs, Membrane Top,	
	3'0" x 3'0" x 2'6"	
	4'6" DIA round table	
9.10	Storage Units Specification: Made of 18mm thick Pre-laminate Board with Sliding Shutters shutters, Lock Shelves, Recessed Handles are provided .	
	5'9" x 2'3" x 2'6"	
	10'0" x 1'6" x 2'6"	
	3'0" x 1'6" x 4'0"	

10. PLUMBING & CIVIL WORKS					
SI No	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED			
	NEW TOILETS				
10.1	Masonry Wall - 6" Masonry wall for new toilets with necessary RCC lintels				
10.2	Supply and laying of water proofing for the flooring.				
10.3	Plumbing works with connectivity for drainage and water connections for all outlets. For new bathrooms				
10.4	Tiles				
	Supply and fixing of antiskid floor tiles Tile cost appx. Rs.65/sft				
	Supply and fixing wall tiles . Tile cost Rs.55/sft				
10.5	Supplying and fixing following Chromium Plated Bathroom fittings of Jaquar or equal approved make Florentine range , fixing to threaded ends of pipe work using Teflon /twine, testing for leak proof etc. complete. Costs of fittings to include pillar cork, s,bibcorks, couplings, flanges, CP pipes				
	Wash Basin Tap				
	Health Faucet				
	Shower System				
10.6	Supply and fixing of CERA Make or equallant fixtures with all necessary accessories, waste coupling , pipes angle cork .				
	EWC - Charishma Ivory 2067				
	Wash Basin ..Cheryl 1068 Cera 600 x 460 mm				
	Coat Hooks				
	Towel Rail				
	Towels Rings				
	Toilet Paper Holders				
	Corner Glass Shelves 12" dia				

SI No	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED			
10.1	REFURBISHING OF OLD TOILETS				
	Floor Tiling - Breaking and removing of existing tile and laying of new tiles cost of tile 65/sft				
	Wall Tiles - Breaking and removing of existing tile and laying of new tiles cost of tile 55/sft				
10.5	Supplying and fixing following Chromium Plated Bathroom fittings of Jaquar or equal approved make Florentine range , fixing to				
	Wash Basin Tap				
	Health Faucet				
10.6	Supply and fixing of CERA Make or equivalent fixtures with all necessary accessories, waste coupling , pipes angle cork .				
	EWC - Cargo 2027 EWCS snow white				
	Urinals - 5001 - white				
	Urinal Division Plate - 5011				
	Wash Basin ..Clair 1023				
	Coat Hooks				
	Toilet Paper Holders				
	Soap Dispenser				
	Paper Towel Dispenser				
10.70	Providing & laying 20 mm thick pre-polished granite slab counter fixed on 75mm thick RCC slab and the edges of granite slab shall be full bull nosed or bevelled as approved by Architect. Rate to include cost of fixing facia/fin granite, base mortar c:m 1:4 of 20mm thick, with necessary brick/block wall support , necessary cut opens, brackets etc. as per drawing & details. (Basic rate of granite Rs. 160/sft.) (Toilet wash basin counter)				
	Supplying approved make Electrically operated hand drier, fixing in perfect position over tile dado using required fixing materials, etc., Complete.				
10.80	Mirrors				

MAKES FOR SANITARY WARE

CLAYTON



CARGO



URINAL



DIVISION PLATE



CHERYL
800 X 470 MM



CLAIR



11. CHAIRS			
SI No	Description	SPECIFICATION CONFIRMED/ NOT CONFIRMED	
11.10	Chairman's Chair (CROWN 1 -Executive High Back With Imported Leather Chair With Multi Locking & Gaslift With Alu Buffed Arms & Base (With Head Rest)		
11.20	Visitors Chairs for Chairman's Table (CONTACT MBGS 'B' LEATHERITE - Flex XS Medium Back Chair with Co-active Synchro, Gaslift & Two Way Adjustable Arms with Leatherite Seat & Back)		
11.30	Sofa -3 seater (S -1003-3S – Red Leather 3 Seater Sofa)		
11.40	Sofa - 2 seater (S -1003 -2S– Red Leather 2 Seater Sofa)		
11.50	DDG's Chair (CROWN 1 -Executive High Back With Imported Leather Chair With Multi Locking & Gaslift With Alu Buffed Arms & Base (With Head Rest)		
11.60	Visitors Chair for DDG's Table (CONTACT MBGS 'B' LEATHERITE - Flex XS Medium Back Chair with Co-active Synchro, Gaslift & Two Way Adjustable Arms with Leatherite Seat & Back)		
11.70	Sofa -3 seater (S -1003-3S – Red Leather 3 Seater Sofa)		
11.80	Sofa - 1 seater (S -1003-1S – Red Leather Single Seater Sofa)		
11.90	DDG's Conference Chairs (CONTACT MBGS 'B' LEATHERITE - Flex XS Medium Back Chair with Co-active Synchro, Gaslift & Two Way Adjustable Arms with Leatherite Seat & Back)		
11.11	Reception Sofas- 3 seater (S -1003-3S – Red Leather 3 Seater Sofa)		
11.12	Cabin Chairs (MD 203 -Executive Medium Back Chairs With Knee Tilt , Gaslift , Adjustable Arms & Plastic Nylon Base)		

11.13	Visitors Chairs for Cabin Table (SMART HBL -09 -3B - Smart Chair With Gaslift With Mesh Back & Seat Cushioned With Plastic Base)			
11.14	Vedio Conference/ Mtng Chairs (CONTACT MBGS 'B' LEATHERITE - Flex XS Medium Back Chair with Co-active Synchro, Gaslift & Two Way Adjustable Arms with Leatherite Seat & Back)			
11.15	Conference Room Chairs (CONTACT MBGS 'B' LEATHERITE - Flex XS Medium Back Chair with Co-active Synchro, Gaslift & Two Way Adjustable Arms with Leatherite Seat & Back)			
11.16	Staff (CONTACT PROJECT MBGS 'B' - Medium Mesh Back Chair with Co-active Synchro, Gaslift & Adjustable Arms)			
11.17	Dining (MC - 1- MINT CHOC CHIP - Visitors Chair with Stainless Steel Rubberwood Seat & Back)			

**PART II
ELECTRICAL WORKS**

BOQ FOR INTERNAL ELECTRICAL WORKS.							
Sl.No.	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED					
1.00	<p>PART - A - SUPPLY AND INSTALLATION OF LT PANELS</p> <p><u>PANEL FABRICATION DETAILS:</u> Supply, Installation, Testing and Commissioning of 3 Phase, 4 wire, 415 V, 0.8 P.F, 50 Hz. panels. The fabrication shall be made with 14SWG cold rolled sheet with M/c pressing. The surface shall be rigorously treated for derusting in 7 tank process with dephosphating and painting with at least 2 coats of approved paint.</p> <p>The panel shall be totally enclosed metal clad type with double gasketing with rubber/resin lining. The panel shall be off white painted inside and shall be having control directory pasted inside the panel. The panel shall be mounted on existing trench and shall have cable entry provision from the top and bottom with suitable alley as the case may be.</p> <p>The panel shall be tested for the same KA rating of the relevant highest rating MCCB. All components shall be from ISO-9001 companies and shall have relevant without fail. (Fabrication, drawing and list of components and panel IS/IEC approvals detail shall be got approved by consultants before fabrication).</p> <p>The panel shall be fully interlocked as required. The panel shall include baseframe channel support. (The Single Line Diagram and enclosed brief scheme may closely be followed).</p> <p><u>Note:</u> 1. The Panel shall be fully as per the requirement of Electrical Inspectorate/ EB authorities.</p> <p>2. Auxilliary contactor to be provided along with auto-manual switch where ever required.</p> <p>3. All Breakers both Incoming & Outgoing shall have LED 'ON / OFF / TRIP' indications without fail.</p> <p>4. CTs shall be with dual ratio and cast resin type.</p> <p>6. For Capacitors earthing shall be provided.</p> <p>8. Cu bus earthing shall be provided for all panels.</p> <p>10. SAFETY CERTIFICATE FOR THE PANELS SHALL BE PRODUCED FROM CEIG.</p> <p>13. All MCCBs shall be microprocessor based only.</p> <p>14. All test certificates must be provided immediately after commissioning.</p> <p>15. Any panel if more than 1.5m width should be made in parts each part not exceeding 1.5m</p> <p>16. The current density for ALU busbars shall be 0.75-0.8 only.</p>						

	17. The current density for CU busbars shall be 1.0 only. 18. All UPS outgoing panels shall have neutral busbars double the size of phase. 19. All MCCB's shall have setting from (40or50)-100%. 20. All Lighting / RP and Lift panels shall have ELR for incomer					
Sl.No.	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED				
1.00	<u>MAIN FLOOR PANEL</u> <u>INCOMER</u> <u>MCCB:</u> Quantity : 1 No ,Rating-160Amps. No. of poles - TP+N, KA rating - 25KA. Type - Manual, Releases - OC / SC , Indication - ON/ OFF / TRIP. <u>METERS:</u> 3 Phase 4 wire, 440 Volts, Digital Voltmeter with selector switch. Range - 0-500V, 10Amps. Ammeter 0 - 160Amps. Master Meter - 1 No. TVSS-80KA ELR-0-8Amps <u>BUS BAR -160A.</u> Alu TP + N + E <u>OUTGOINGS:</u> <u>MCCB:</u> Quantity :1Nos, Rating-125Amps. No. of poles - TPN, KA rating - 16KA. <u>MCCB:</u> Quantity :2 Nos, Rating-63 Amps. No. of poles - TPN, KA rating - 16KA. <u>MCB:</u> Quantity :8 Nos, Rating-63 Amps. No. of poles - TPN, KA rating - 16KA.					
1.00	<u>UPS OUTGOING PANEL</u> <u>INCOMER</u> <u>MCCB:</u> Quantity : 2 Nos ,Rating-63Amps. No. of poles - TP+2N, KA rating - 25KA. Type - Manual, Releases - OC / SC , Indication - ON/ OFF / TRIP. <u>METERS:</u>					

3 Phase 4 wire, 440 Volts, Digital Voltmeter with selector switch. Range - 0-500V, 10Amps. Ammeter 0 - 63Amps. TVSS-40KA <u>OUTGOINGS:</u> <u>MCB:</u> Quantity :4 Nos, Rating-40 Amps. No. of poles - TP+2N, KA rating - 16KA.							

PART - B - LT CABLE WORK		SPECIFICATION CONFIRMED/NOT CONFIRMED					
2.00	Supply, Instalaltion, Testing & Commissioning of XLPE insulated sheathed steel tape armoured Aluminium UG cable with pvc outer sheathing 1.1 KV class . The cable shall be either laid on existing cable trays or in existing trench. The cable shall be tied with nylon ties on the cable tray and a overlapping 25x3mm GI strip shall be fixed to the cable tray. The cost of the nylon tie and overlapping GI strip shall be included in the cost of installation. (Not to include the cost of cable trays/trench). (All cables shall be AS PER IS 7098)						
2.10	Armoured Aluminium Cable:						
a	3.5 Core, 150 Sqmm cable.From Builder panel to Floor panel.						
b	3.5 Core, 95 Sqmm cable.(From Main power panel to AHU UNIT 1R X75MTS)						
c	4 Core, 16 Sqmm cable.						
2.20	UNARMoured COPPER FLEXIBLE CABLE:						
	Supply, Instalaltion, Testing & Commissioning of PVC flexible Copper cable 1.1 KV class . The cable shall be either laid on existing cable trays or in existing conduit.. (Not to include the cost of cable trays/conduit).						
a	1 Core, 25 Sqmm cable.						
b	4c+1c, 16 Sqmm cable.						
c	4 Core, 10 Sqmm cable.						
3.00	END TERMINATIONS						
	Supply, Installation, Testing & Commissioning of End terminations for following cables using						

	double compression tinned brass glands with bronze lugs using hydraulic crimping tools complete. Aluminium cables:						
a	3.5 Core, 150Sqmm						
b	3.5 Core, 95 Sqmm						
c	4 Core, 25Sqmm cable.						
d	4 Core, 10 Sqmm cable.						

3.10	END TERMINATIONS Supply, Installation, Testing & Commissioning of End terminations for following cables using double compression tinned brass glands with bronze lugs using hydraulic crimping tools complete. Un Ar copper cables:						
3.20	1 Core, 25Sqmm cable. From Main power panel To UPS -1 & 2. From UPS-1&2 TO UPS Outgoing panel.						
3.30	4c+1c , 16 Sqmm cable.						
4.00	GI CABLE TRAY - LIGHT DUTY Supply and installation of hot dipped GI as per IS 2629, prefabricated ladder type cable tray including supporting system with 2.5mm hi-tech slotted channel, support channels, hi tech rod system. The rate shall include bends, angles, Ts and all accessories complete.						
4.10	300mm wide, with 50mm height , 2mm thick ladder type.						
4.20	150mm wide, with 50mm height , 2mm thick ladder type.						
4.30	Supply & Installation of 50mm dia PVC conduit.						
4.40	FLOOR WIRE WAYS FOR NETWORKING & POWER CABLING: Supply & Installation of floor wire ways pre-fabricated out of GI, 14 swg as per IS 2629, with removable covers with finally threaded screws. The entire fabrication and finish shall be as per approval of architects / Consultants. Local fabrication is not permitted shall be complete with all bends, joints and accessories. The installation includes co-ordination with the other agency for floor embedding. FOR NETWORKING CABLING.						

a	Size - 300mm (W) x 45mm (D) - WIRE WAYS						
b	Size - 150mm (W) x 45mm (D) - WIRE WAYS						
c	Size - 75mm (W) x45mm (D) - WIRE WAYS						
	FOR UPS &RAWPOWER CABLING						
d	Size - 300mm (W) x 45mm (D) - WIRE WAYS						
e	Size - 150mm (W) x 45mm (D) - WIRE WAYS						
f	Size - 75mm (W) x45mm (D) - WIRE WAYS						
	JUNCTION BOX						
g	Supply & Installation of 14 SWG GI 350x350x50mm floor junction box with cover to match with item no. 5.00 above including co-ordination with other agencies for embedding in floor.						
h	Supply & Installation of 14 SWG GI 200x200x50mm junction box with cover. to match with item no. 5.00 above including co-ordination with other agencies for embedding in floor/column cladding.						
i	Supply & Installation of 14 SWG GI 100x100x45mm junction box with cover. to match with item no. 5.00 above including co-ordination with other agencies for embedding in floor/column cladding.						

	PART - C : INTERNAL ELECTRICAL WORKS	SPECIFICATION CONFIRMED/NOT CONFIRMED					
5.00	FINAL DISTRIBUTION BOARDS. Supply, Installation, Testing and Commissioning of all MCB , phase segregated type Distribution Boards (9KA) made out of 16SWG MS sheet steel enclosure hinged MS cover/over flanged cover with cutouts for cutouts for operating the MCB knobs and comprising of phase busbars, neutrals and earth bus with tapped holes, bakelite phase barriers, pvc insulator shoes for incoming wire etc complete. DBs shall be mounted by grouting in to the wall/angle to brick wall as required. DBs shall be suitable for single &Three phase loads. Or DBs shall be mounted on suitable M.S. angle and supporting flat. DBs shall include termination lugs etc., all complete. As per Electrical Inspectorate requirement. (Note: 1. Local fabrication not permitted. Only factory made boxes shall be installed and all MCBs shall be with 9 KA rating.						

5.10	Lighting DB - LDB - 3 Phase 8 Way: Incoming: 1 No. 63A 4P MCB,C "Curve" Incoming: 3 Nos. 32A DP RCBO's.-100mA Outgoings: 24Nos. 10/16A SP MCB.						
5.20	RAW POWER DB - - 3 Phase 6 Way: Incoming: 1 No. 63A 4P MCB,C "Curve" Incoming: 3 Nos. 32A DP RCBO;s.-100mA Outgoings: 18Nos. 10/16A SP MCB.						
5.30	UPS POWER DB - - 3 Phase 6Way: Incoming: 1 No. 63A 4P MCB,D "Curve" Incoming: 3 Nos. 32A DP RCBO -300mA Outgoings: 18Nos. 16/20A SP MCB.						
5.40	SERVER DB - -1 Phase 12Way: Incoming: 1 No. 40A DP MCB,D "Curve" Incoming: 8 Nos. 32A DP RCBO -300mA						

6.00	<p>INTERNAL WIRING</p> <p>Supply, Installation, Testing and Commissioning of point wiring using (3 x 1.5) Sqmm 1100V grade stranded FRLS wires of approved make drawn in 25mm dia 2mm thick Rigid PVC conduit of approved make including all conduit accessories such as bends, junction boxes etc., complete. The wiring shall be done in complete looping in system. The switches used shall be moulded fixed in factory made integral GI box units with clear earthing facility. The wiring shall be complete with ceiling roses, switches and all consumables. The switches shall be of Anchor Roma / Wipro Aspire make.</p> <p>a PRIMARY LIGHT POINT</p> <p>I. Primary light point means wiring from first switch control to the first light out let.</p> <p>II. Not to include the incoming lighting circuit from MCB-DB to switch.</p> <p>III. But to include the sub circuit if it is drawn from adjacent switch box.</p> <p>c SECONDARY LIGHT POINT</p> <p>I. Secondary light point means extension of light out let only from existing Primary point to be controlled by the existing switch of Primary point only.</p> <p>e To wiring as in item no. 3.00 using (2R X 2.5+1RX1.5) sqmm pvc insulated FRLS wire drawn in 25mm dia 2mm thick PVC conduit as lighting circuit, being recond from the distribution board to first light control switch.</p> <p>f Supply & Installation of 6/16A 5 pin socket with DP switch with indicator in appropriate make factory made GI boxes. (Excluding circuit) - For Raw power./AC/</p> <p>g Supply & Installation of 5 A 3 pin switch socket excluding boxes. - Excluding circuit - for Raw Power . 1 socket controlled by one switch with indicator.</p> <p>h Supply & Installation of 2 Nos. 5A 3 pin INTEL socket with 15A SP switch.(Excluding circuit) - for UPS.</p> <p>i Supply & Installation of 3 C x 4 Sqmm 1100V unarmoured double insulated flexible wire in white for UPS and black for / RP/AC/ circuit</p> <p>j Supply & Installation of 25mm dia 2mm thick rigid pvc conduit excluding wiring with clamps, bends, suspensions etc. For TV, UPS, Telephone and raw power conduiting.</p> <p>k 32A, 5 Pin, 3 Phase industrial metal clad sockets with interlock.</p> <p>l 32A, 3 Pin, 1 Phase industrial metal clad sockets with interlock.</p> <p>m Supply & Installation of TV Point with RJ-11 TV SOCKET</p>						
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in 25mm dia pvc conduit and RJ-9 Co-axil cable
n 32A, 5 Pin, 3 Phase TPN MCB ISOLATOR WITH ENCLOSURE.

	PART - D : SUPPLY & INSTALLATION OF LIGHT FIXTURES						
7.00	Supply & Installation of light fixtures complete with Trulite lamps, starter, electronic / Copper ballast etc., complete. The rate shall include all mounting accessories like angles, fasteners, supports, chain, adjustable hooks, grip bolts and nuts etc., complete. Note: THD harmonics output less than 10%.						
a	2'X2' Recessed mounting Direct-Indirect 2x 36W CFL light fixture, with CFL lamp (for workstations area,Cabins,Meeting Room)						
b	2'X2' Recessed mounting Direct- Indirect light fixture, with 2 x36W CFL lamp Electronic dimmerable ballast (for conference room)						
c	Supply & Installation of 2 x 13 W CFL recess mounted down lighter with Elecironic Dimmerable Ballast Make : Wipro / Philips / GE / Eqvlt. Cat No. : WCP - 34213 / FBH 145 213						
d	Supply & Installation of 2 x 13 W CFL recess mounted down lighter with fresnel lens. Make : Wipro / Philips / GE / Eqvlt. Cat No. : WCP - 34213 / FBH 145 213						
d	Supply & Installation of 1 x 13 W CFL recess mounted down lighter with fresnel lens. Make : Wipro / Philips / GE / Eqvlt. Cat No. : WCP - 34213 / FBH 145 213						
e	Supply & Installation of 1 x 13 W CFL Surface mounted down lighter with fresnel lens. Make : Wipro / Philips / GE / Eqvlt. Cat No. : WCP - 34213 / FBH 145 213						
f	2',36 W CFL Mirror Light Fixtures with Lamp.						

g	Recessed mounting type Eye ball light fixture with 12V / 50W Halogen .						
h	Wall bracket type decorative light fitting with 1 x 18 / 26W CFL Lamp,						

i	Supply & Installation of surface mounted 4ft. patti type luminaire suitable for 1 x 36W FTL lamp for diffused lighting.. Make : Wipro / Philips / GE / Eqvlt. Cat No. : WDF-5140 NS						
j	Supply & Installation of surface mounted 2ft. patti type luminaire suitable for 1 x18W FTL lamp for diffused lighting.. Make : Wipro / Philips / GE / Eqvlt. Cat No. : WDF-5140 NS						
k	Supply & Installation of 5W LED Fixtures						
l	Supply & Installation 9" Sweep Exhaust fan						
7.10	Supply & Installation of light fixtures complete with Trulite lamps, starter, electronic / Copper ballast etc., complete. The rate shall include all mounting accessories like angles, fasteners, supports, chain, adjustable hooks, grip bolts and nuts etc., complete. Note: THD harmonics output less than 10%.						
7.20	2'X2' Recessed mounting Indirect 2x 36W CFL light fixture, with CFL lamp (Biometric Room)						
7.30	Supply & Installation of 2 x 13 W CFL recess mounted Indirect down lighter with fresnel lens. Make : Wipro / Philips / GE / Eqvlt.						
7.40	Supply & Installation of 12V,50W Track Light Fixtures						
7.50	LIGHTING CONTROL SENSORS Non - Programmable Presence Detector for Lighting Control .						

PART - E : EARTHING SYSTEM		SPECIFICATION CONFIRMED/NOT CONFIRMED					
8.10	Supply and installation of pipe electrode earth station as per IS 3043 complete with 38mm dia 'B' Class GI pipe,						

	<p>Copper plate earth station copper(tinned)plate, complete with 600 x 600 x 3mm CI frame and heavy duty CI cover, 300mm brick masonry chamber etc., complete. UPS Neutral - 4 Nos. EPBAX - 1 No. SERVER RACK Neutral - 1 No. DEDICATED EARTHING - 1 No.</p>						
8.20	<p>Glearth station as per IS 3043 GI Flat B Class, GI pipe with watering funnel, 450 x 450 mm CI frame and heavy duty CI cover, 300mm brick masonry chamber etc., complete. UPS BODY 2 Nos. LT PANEL BODY 2 Nos.</p>						
8.30	Earth strips - GI / Copper.						
8.40	25 x 3mm GI flat						
8.50	25x6mm Cu flat with bus bar support s and pvc sleeves.						
8.60	Supply and laying of 8 SWG GI wire .						
	PART - F : MISCELLANEOUS	SPECIFICATION CONFIRMED/NOT CONFIRMED					
9.00	Danger board in 3 languages English / Hindi / Local Language in red colour radium reflector sticker with 440V marks.						
9.10	CO2 fire extinguisher 4.5Kg						
9.20	CO2 fire extinguisher 2.5Kg						
9.30	Rubber mat of 10mm thick with 15KV voltage tested in Main Electrical room. (Single sheet not cut pieces)						
9.40	<p>Professional charges towards getting approval of detailed drawings from CEIG / Electrical Inspectorate obtaining clearance from Electrical Inspectorate for the installation (Power supply already exists) Note: Following As-built drawings to be submitted:</p>						

	1. 4 sets of hard copies - colour prints. 2. 1 set of softcopy of all drawings in CD.						
Sl.No.	Description						
	INTERNAL ELECTRICAL WORKS	SPECIFICATION CONFIRMED/NOT CONFIRMED					
	PART - G : SUPPLY & INSTALLATION OF LIGHT FIXTURES FOR CONCEPT CENTRE						
1.00	Supply & Installation of light fixtures complete with Trulite lamps, starter, electronic / Copper ballast etc., complete. The rate shall include all mounting accessories like angles, fasteners, supports, chain, adjustable hooks, grip bolts and nuts etc., complete. Note: THD harmonics output less than 10%.						
1.10	2'X2' Recessed mounting Indirect 2x 36W CFL light fixture, with CFL lamp (Biometric Room)						
1.20	Supply & Installation of 2 x 13 W CFL recess mounted Indirect down lighter with fresnel lens. Make : Wipro / Philips / GE / Eqvlt.						
1.30	Supply & Installation of 12V,50W Track Light Fixtures						
1.40	LIGHTING CONTROL SENSORS Non - Programmable Presence Detector for Lighting Control .						

LIST OF RECOMMENDED MAKES FOR ELECTRICAL WORKS

SL.NO.	DESCRIPTION.	BRAND.
		1
1	PVC CONDUIT 2mm tk.	VIP / PRECISION / SUDHAKAR / UNIVERSAL
2	MS CONDUIT (16G) 1.6mm tk.	BI / GUPTA/ SUPREEM/ BHARATH
3	MS CONDUIT ACCESSORIES	PEW / HOMELITE/
4	PVC FRLS COPPER WIRES	FINOLEX/HAVELLS/ ANCHOR/RR
5	TERMINATION MATLS.	SMI / DOWELLS/HMI
6	5/15A MODULAR SW. / SOC.	ANCHOR ROMA / MDS/ ABB /SCHNEIDER/ MK/CRABTREE
7	MCB / MCB DB	MG /G/SCHNEIDER/SIEMENS / MDS /LEGRAND/INDOASIA
8	RCBO	MG/ SIEMENS/GE/SCHNEIDER/ MDS LEGRAND/INDO ASIA
9	METAL CLAD SOCKET	BCH / CLIPSAL / NEPTUNE/ MDS LEGRAND
10	CABLE TRAY 2mm tk.	STORAC / INDIANA / PROFAB
11	EXHAUST FAN	GEC / ALMONARD/ CROMPTON GREAVES
12	LIGHT FITTINGS	WIPRO/PHILIPS/HAVELLS/PRISAM/B AJAJ
13	DECORATIVE LIGHT FITTINGS	WIPRO/PHILIPS/HAVELLS/PRISAM/B AJAJ
14	MCCBs	ABB/ L&T/SCHNEIDER (MG)/
15	CONTACTORS & O/L RELAY	ABB/ L&T/SCHNEIDER (MG)/
16	CAPACITOR 'ALL PP'/ HEAVY DUTY MPP	UNIVERSAL /UNISTAR/ MEHER / ASIAN /SIEMENS/ L&T
17	CTs & PTs CT & PT'S	KAPPA / INDCOIL / SIEMENS
18	CONTROL SWITCHES/SWITCH FUSE UNIT	KAYCEE/ GEC / ALSTHOM / SIEMENS

19	ELR / EARTH FAULT RELAY	ALSTOM / PROK DVS /MDS LEGRAND
20	PROTECTIVE RELAYS	ALSTOM / AVKC/SCHNIDDER/ABB/
21	PUSH BUTTONS	SIEMENS / TECKNIC/L&T/ABB/GE
22	INDICATING LAMPS (LED TYPE)	SIEMENS / TECKNIC
23	WIRS (FRLS)	L&T/RR CABLE/FARCOM/ FINOLEX
24	LUGS/GLANDS	SMI/ DOWELLS/HMI
25	TERMINALS	ELMEX / ESSEN - FINGER TOUCH PROOF
26	FERRRULES	MAYFAIR
27	PANEL FABRICATOR	POOJA POWER SOLUTION /STAR SWITCH GEAR/ /RADIANT SWITCHGEAR/STAUMITRA CONTROLS/POWER PACK.
28	CELING FAN&WALL MOUNTED FAN	BAJAJ/ USHA/ HAVELLS/CG
29	SERVER RACKS	RITTAL/VEROPRESIDENT
30	E-Cat 5/6 DATA CABLE, PATCH PANELS, I/O OUTLETS	AVAYA/D-LINK/MOLEX/KRONE
31	LED INDICATION LAMPS	BINARY/L&T/SCHNIDDERr/VAISHN AV
32	SELECTOR SWITCH	L&T / KAYCEE
33	TIMERS	L&T/GE
34	ROTARY SWITCH	L&T/GE/SIEMENS.
35	WIRE WAYS	STORAC / INDIANA / PROFAB

ANY OTHER ITEMS		TO CONSUTANTS APPROVAL

DATA & VOICE NETWORKING		
BOQ FOR NETWORKING WORKS		
Sl.No	PARTICULARS	SPECIFICATION CONFIRMED/NOT CONFIRMED
1.0	DATA & VOICE NETWORKING	
	DATA POINTS	
a	CAT-6 UTP four pair cable in Existing PVC conduit / floor channels with required ferruling, cable dressing, testing etc. complete.with test certificates.	
b	CAT-6 Information outlets	
c	Quadral flush mounted face plates.	
d	Rack mountable 24 port modular Jack panels With required accessories.	
2.0	VOICE POINTS	
a	CAT-6 UTP four pair cable in Existing PVC conduit / floor channels with required ferruling, cable dressing, testing etc. complete.with test certificates.	
b	CAT-6 Information outlets	
c	Rack mountable 24 port modular Jack panels With required accessories.	

3.0	COMMUNICATION RACK, AND ACCESSORIES	
	Floor mounting open Rack AC distribution box required vertical & horizontal cable managers, etc.	
a	32 U Open Rack	
b	Supply of 4feet patch cord	
c	Supply of 7feet patch cord	
d	Supply and laying of 30Pair Telephone Cable indoor only	
e	Supply and fixing of 30 Pair krone with enclosure.	
4.0	DUMMY PVC CONDUITS	
	Supply and running of 2mm thick PVC Conduits with all fixing accessories Like bends,colors,Tee'setc	
a	32mm dia,(FRLS) PVC Pipes with all accessories.	
b	25mm dia,(FRLS) PVC Pipes with all accessories.	
c	19mm dia,(FRLS) PVC Pipes with all accessories.	

FIRE ALARM SYSTEMS		
BOQ FOR FIRE ALARM SYSTEM WORKS		
SL.No.	DESCRIPTION OF WORK	SPECIFICATION CONFIRMED/NOT CONFIRMED
1.0	PART-A- FIRE ALARM SYSTEM	
	ADDRESSABLE TYPE	
I	I LOOP CONTROL PANEL	
	Supply, installation, testing & commissioning of	
	Addressable Fire Alarm panel with Supporting of maximum 250	
	Devices in single loop with audio visual fire	
	indications, complete with system ON / OFF	
	switch, test buttons for open / short circuit	
	indications with maintenance free battery backup	
	backup facility of 24 hour,battery charger, battery	
	rectifier & digital communicator for central monitoring	
	station connectivity etc.	
II	Supply, installation,testing & commissioning of	
	optical / photo electricAddressable type detectors with dual LED	
	indication Above	
III	Supply, installation, testing & commissioning of	
	fixed temp./ rate of rise in temp. heat detectors.	
	temp.(Heat Detector)	
IV	Supply, installation, testing & commissioning of	
	Addressable type Manual Call points with hammer and chain.	
V	Supply, installation, testing & commissioning of	
	Addressable Type electronic fire alarm hooters.	
VI	Supply, installation,testing & commissioning of	
	Response indicators .	
2.10	CONDUITS & CABLES	
	Supply, laying,commissioning and testing of	
	1100V grade FRLS PVC insulated copper conductor	
	single core wires of 1.5sqmm / PVC insulated	
	copper conductor cable of 1.5sq mm, run in 2mm	
	thick PVC conduits of not less than 19mm dia.	
	The rate quoted shall include all accessories like	
	bends, collars, MS junction boxes, clamps,etc.,	
	complete.	
I	2 Runs of 1.5sqmm FRLS PVC insulated copper	
	conductor single core wires run in PVC conduit	
	of not less than 19mm dia.	

LIST OF RECOMMENDED MAKES FOR SECURITY SYSTEM WORKS

SL. NO.	DESCRIPTION.	Accessories	MAKE
1.00	Fire Alarm System	Control Panel	Honeywell, GE, EST, Siemens,
		Detector	Honeywell, GE, EST, Siemens,
2.00	Access Control	Control Panel	Siemens, Cardx, Spectrum,
		Reader	HID, EM Proximity
		Lock	BEL, Insyn,
		Exit Switch	Insyn
3.00	Public Address System	Speakers	Bosch, Ahuja,
		Consol	Bosch, Ahuja,
		Volume Control	Bosch, Ahuja, MK
4.00	CCTV	Camera	Sony, Bosch, Samsung, Pelco, Honeywell
		DVR	Sony, Bosch, Samsung, Pelco, Honeywell
5.00	Cables		Policab, Sunrise, Finolex, Versa

AIR CONDITIONING

Annexure:-1 Machine prices and hi-Side works

BOQ of VRV system Air-Conditioning

SLNO	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED
	SUPPLY OF VRV/HI BRID AIR-CONDITIONING EQUIPMENT.	
1	Supply & Installation testing commissioning and handing over of VRV/Hi brid airconditioning system comprising of Modular type high efficiency DC Scroll / Twin Rotary Multiple Compressor with DC inverter, High efficiency heat transfer Cooling Coil suitable for Environment friendly R410a / R407c/ R22 refrigerant, Air cooled propeller type condenser fan with DC motor drive, interconnecting piping, suction line insulation etc., Micro-processor control panel suitable for automatic operation, High speed calculation inverter control, active oil control mechanism incorporating all safety functions as per equipment specifications & other points as listed below:	
	All components shall be mounted on welded steel base frame, structural steel profiles/panels made out of M/S steel, protected with primary coat & finished with acrylic paint.	
a	Outdoor Unit(ODU) : COOLING ONLY. Capacity : 30.0 HP (Two modules)	
2	Indoor Unit(IDU): Cooling Only : Supply, installation, testing, commissioning and handing over of VRV indoor units. All the units shall be supplied with Cordless remote control.	
b	Serving Area: Concept centre 4.0 tr 14 kw 4 Way cassette	
c	Serving Area: Confrence room and chairman's cabin 3.2 tr 11.2 kw 4 Way cassette	
d	Serving Area: Concept room server 1.03 TR 3.6 kw Hi-Wall splits.	
e	Serving Area: Main server, Guest rooms, data and quality centre. 1.06 TR 5.6 kw Hi-Wall splits.	
f	Serving Area: UPS ROOM /Electrical room 2.03 TR 7.1 kw Hi-Wall splits.	
i	Remote controller cordless for Cassette splits.	
j	Remote controller cordless for Hi-wall splits.	

k	Central controller outdoor unit.	
l	Imported fittings,Y-Joints and headers etc as per the layout	
Sl.No	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED
	SUPPLY OF DX DUCTABLE SPLIT AIR CONDITIONER	
1	Supply installation testing commissioning and handing over of Actual Capacity 10.3 TR @ 38 Deg C ambient, ceiling Mounted air cooled DX Packaged unit with long Distance Copper Refrigerant Piping Units) complete with fan section, coil section, filter section, twin circuits, matching outdoor unit with two (2) scroll compressors of equally capacity, air cooled condenser coils, condenser fans with weather proof motors, safety controls, microprocessor controlled starter for evaporator fans, etc., <u>Refrigerant shall be /R 22</u>	
a	11.0 TR	

AIR CONDITIONING

BOQ of VRV system Air-Conditioning

SLNO	Description	SPECIFICATION CONFIRMED/NOT CONFIRMED
	LOWSIDE WORKS OF VRV/HI BRID AIR-CONDITIONING EQUIPMENT.	
	Factory fabricated GSS Ducting (Box ducts only) with powder coated M.S. angle Flanges, supports, neoprene rubber gaskets, VOC free adhesives, bolts, washers & nuts. GSS ducting shall meet the requirements of Class VIII. Site fabrication is not permitted. Ducts should be supplied, stored and installed with polythene sheets wrapped around and the open ends are sealed from the factory.	
1	Make ; Rolarstar /Camduct	
a	24 G	
b	22 G	
c	20 G	
	Supply and installation of duct thermal insulation of semi rigid fibreglass of 25 mm thick 24 Kg/cum in density, faced with .26G AL .foil sheet	
2	AL .foil sheet	
	Supply and installation of Acoustic Insulation for ducting made out of 25mm thick rigid fibre glass of 48Kg/Cum covered with RP Tissue and 26 G Aluminium perforated sheet. Corner joints with GI Angle clamps.	
3		
	Plenuem box made of 22g GI sheet for Supply air duct of size 450x450 & 375x375. Plenuem with projected notch for firmly fixing the diffuser. With Supports To match the diffuser neck.	
4		
	450x450 neck size	
	Aluminium powder coated supply air diffuser of 450x450 neck size with color damper to fix with plenuem box notch for firmly fixing flexible ducts and the outer size of diffuser should be 600 x600 with OBD.	
5		
	Aluminium powder coated Return air diffuser of 450x450 mm neck size and the outer size of diffuser should be 600 x600 with OBD.	
6		
	250 mm dia spigot made of 20g GI sheet for supply air diffuser. Spigots to have projected notch for firmly fixing the flexible ducts.	
7		
	250 mm dia insulated flexible duct for Supply air diffuser. Ducts to be hung stretched and not left sagging. Tag of length 4" more than the spigot circumfrance to be supplied with the flexible duct.	
8		
	Aluminium factory extruded, powder coated contionous grille with end flanges fixed from factory for supplyair of the sizes mentioned in drawings. Groove for Screw fixing on the grille to be counter sunk. Stream splitter damper should be operable through screw head.	
9		
	GI volume control damper (Quadrant type and Opposed blade construction) with matching flanges on both side. The space between the bolts should be not more than 100 mm.	
10		

11	Supply installation of hard drawn copper refrigerant pipes with 19mm & 13 mm thick closed cell elastomeric Tubular insulation for suction line, supports, fittings, etc...for VRF system 38 hp	
12	Supply installation of hard drawn copper refrigerant pipes with 19mm & 13 mm thick closed cell elastomeric Tubular insulation for suction line, supports, fittings, etc...for DX type Ductable system 10 tr	
13	Supply installation, testing, & commissioning of electrical cables for indoor outdoor & control cables for all units as per tender drawing.	
a	2.5 sqmm 4 c	
b	4 sqmm 4 c	
14	Supply, installation HDPE condensate drain pipe with NRV necessary fittings, supports, etc., for split AC,s	
c	35 mm dia	
15	Air Balancing of each individual supply air outlet to within +10% or -5% of the design air quantity and tabulating the same in a form of report and also the final air balancing figures to be indicated against each measured outlets in the as built drawings. Balancing also includes balancing of return air, supply air and outdoor fresh air quantity.	
16	Supply installation of duct supports, fasteners, with angle frames, channels as per duct layout	