BILL OF QUANTITY FOR INTERIOR FURNISHING WORK BANK OF BARODA , NOIDA REGION OFFICE,					
S.No.	**PARTICULARS**	**QTY**	**UNIT**	**RATE (Rs.)**	**Amount (Rs.)**
1.0	**PARTITIONS AND DOORS**				
	Measurement of height shall be taken from finished floor level, up to the level of false ceiling, i.e., finish area of partition. In case of varying heights on either side of partition, average height shall consider. The Main framework of partition should be fixed to RCC ceiling. but payment to be considered up to bottom of false ceiling only. The rate to include provision of extra framework as necessary for skirting and making cut-outs for electrical switch plates, switch boxes, light fittings light etc. making provision for laying conduits as per drawings & directions. All woodwork if used to be applied with 2 coats of fire-retardant paint and 1 coat of wood preservative with anti-termite treatment properties. Centre to center spacing of partition framework may vary to make provision for fixing dado rail / to adjust the level of glass or for fixing counter / storage units or otherwise as per site requirement. Laminate sheet used should be 1mm thick of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS: 2046 Type S, including cost of adhesive of approved quality.				
1.1	**FULL HEIGHT SOLID LAMINATED PARTITION**				
	Providing and fixing in position solid Full Height partition appx.75 mm thk. in Aluminium anodized Box Sections of JINDAL or approved make. Frame 50 mm x 50 mm clear size heavy duty with 16 gauge placed at framework of 600 X 600 mm grid (horizontally and vertically) fixed rigidly at floor lvl. With fasteners, other end fixed to top RCC roof. Completing partition by fixing 12 mm thick fire retardant plywood conforming to IS: 5509 (with one side coat of approved primer) fixed both sides of aluminium frame and then covering outer face of ply at both sides with 1mm thick Laminate (approved shade), including 6 mm groove in ply to be form by fixing additional 6mm thk.50 mm wide ply on aluminium frame work , as per design	72.00	Sq.Mt.		
	Rates to include all fittings fixtures hardware, complete in all respect. Door in partition shall be measured as partition, Including door frame (75X40mm) for shutter of steam beech /teak wood with single leaf shutter (3'x8') made with wooden laminated flush door with glass slit in circle/ as per design and handles on both sides of shutter (hardware, fittings, fixtures etc. in heavy duty SS such as lock of 6 lever of Godrej or Dorset make with SS mortise handle of approved make and model.				
	The rate shall be inclusive of PU paint /polish on door frame/ exposed wooden surface, door closers, SS heavy duty hinges, tower bolts, SS foot operated door stopper, SS buffer along the back side and any other related hardware, fittings, fixtures etc. required to the complete satisfaction of the Architect. (Aluminium section - Jindal or Equivalent)				

1.2	**FULLY GLAZED PARTITION (TOUGHENED GLASS)**				
	P/F Glass Partitions of 12 mm thick. toughen glass Polished edge. The Fixed glass to be fixed using slimline aluminium frame section (K-LITE 25 series of Ozone)or approved make , of size 25x22MM / 25x25mm to be fixed on to the floor/wall/ ceiling as per frame, will be on four sides with I & T and L for glass joints along with required gasketof approved shade etc. complete as per Architectural drawings and direction of Engg-in-charge. The item includes toughen glass 2400 mm height maximum, and above is laminated partition . complete in all respect as per item no.1.1	64.00	Sq.Mt.		
	(Glass Make- Saint Gobain/Modiguard/Asahi)				
1.3	**TOUGHENED GLASS DOOR**				
	P/F Single leaf / Double leaf TOUGHEN GLASS DOORS: Installation of fully glazed frameless glazed door (Single leaf of size as mentioned in drawing and as directed by the Architect) made out of 12 mm thick. Toughened glass and the door shall be fixed with Dorma, Hafele, Ozone or approved make floor springs, lock , with SS finish patch fittings on top, bottom. The door shall have lock in the mid of shutter as per approval with 450 mm to 600 mm long SS handle of 25 mm dia. (for internal doors) to be fitted horizontally/ vertically as per instructions of the Architect of approved design . The Rate shall be including the making of necessary holes in glass for Access control locks, complete in all respect with all hardware, fittings, fixtures etc. All necessary hardware, fittings, fixtures to be approved from the Architect or Bank's Officials before actual application of the same. Any change in the specifications must be first approved from the Architect and the Bank.				
1.3a	Size of opening is appx.1000 x 2400 (Single Leaf)	3.00	NOS.		
1.3b	Size of opening is appx.900 x 2400 (Single Leaf)	2.00	NOS.		
1.3 c	Size of opening is appx.1200 x 2400 (Single Leaf)	1.00	NOS.		
1.3 d	Double leaf 1800 x 2400 mm	1.00	NOS.		
1.5	**Low Height Partition**				
	Providing & fixing Low Height laminated Partition 1200 mm high with same specifications for framing as item no. 1.1. Item to have partial 12mm toughened glass / soft board with fabric mounted above / 5 mm laquer glass(20" x 12" size) fixed as per design/ details. Item to include 3" x 1" wooden moulding on top complete with PUpaint mat finish / Duco Paint/ polish including base preparation as per manufacturer specifications. Complete to the satisfaction of the Architect. Rates to include, making provision for electrical conduits, switches and junction boxes. complete in all respect as per instructions from Architect.	49.37	Sq.Mt.		

1.6	Providing and fixing in position solid Full Height partition in Aluminium anodized Box Sections of JINDAL/ INDAL 50 mm x 50 mm clear size heavy duty with 16 guage placed at framework of 600 X 600 mm grid (horizontally and vertically) fixed rigidly at floor lvl. With fasteners, other end fixed to top RCC roof with 12 mm thk. Fibre Cement bounded EVEREST board both side, complete in all respect, as per design. Rates to include conduit provision inside partition and 3 or more coats of White Matte Luster Paint (Royal Luster Asian Paints) as per manufacture specifications. Door in partition is considered as part of partition with opening size(900 x 2100 mm) . Door frame of white power (Minimum thickness of powder coating 50 micron) coated, L type tube sections of Jindal make Section No - 20843, Wall Thk - 1.42mm, Anodized of approved colour and Shade. Door shutter of standard tubular sections/appropreate Z sections / other sections of approved make conforming to IS:733 and IS:1285 with 12 mm toughen glass fixed with EPDM rubber/ neoprene gasket etc .Aluminium sections shall be smooth,rust free,straight, jointed mechanically wherever required ,all complete as per architectural drawing, with necessary hard ware and fittings, locks , aluminium round shape handle of outer dia 100 mm with ss screws , aluminium tower bolts etc . **(Data and Ups room)**	37.00	Sq.Mt.		
1.7	**FLUSH DOOR**				
	Providing & fixing 35mm thick ISI marked Flush Doors shutter conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. The item to includes, providing and pressing of 1mm thick. decorative/textured laminate on both sides as per design. Providing and fixing door frame made from 100mmx50mm teak wood members. Each Doors to have complete PU paint mat finish on exposed wooden surfaces i.e., Frame of shutter, all hardware fittings , fixtures etc. in heavy duty SS such as SS mortise handle of approved make and model (dorset make) , 125mm SS hinges, SS tower bolts, (Dorma/ Hettich/ Godrej) etc. with partial glass slit of circle shape , with 8 mm thk toughen glass , complete in all respect as per Architectural drawings and direction of Engg-in-charge				
	Door size (900 x 2100 mm) Pantry + record room	2.00	NOS.		
	Door size (750 x 2100 mm)	1.00	NOS.		
1.7	**MOTORISED ROLLING SHUTTER AT FRONT ENTRY**				

1.7	Providing, fixing and installing motorised rolling shutter having made out of 2mm interlocking lenses either of honeycomb or perforated profile coupled together with horizontal aluminium section tubes complete with M.S. Guide complete with bottom rails and brackets made from M.S. sheet, with fitting accessories in best workmanship. The Automation system comprising of compact gear motor with advanced technology having patented safety mechanism with control panel (manual in case of power failure) and key selector with remote control complete up to the satisfaction of the Architect. Size: as per attached layout (1 nos.)appx. 12'x8' Material: The shutters shall consist of M.S. lath sections conforming to IS 513-1986, 2 mm thick and 80mm wide. Rate including all the tools, tackles, hardware and consumable items etc. Rate excluding motor due to motor rate paid separately. but motor installation included.	9	sq.m.		
	Clear opening, [plaster line over brickwork opening] shall be measured for billing. Side top and bottom overlaps are inclusive in rates.				
1.7.2	Shutter electric Motor capacity 1.5 times to weight of shutter, Motor Make: GE, Kirloskar, Crompton for above mentioned size.	1	No.		
1.7.3	Manual rolling shutter : Size of opening 1300 x 2400mm appx.				
	Material: The shutters shall consist of M.S. lath sections conforming to IS 513-1986, 2 mm thick and 80mm wide. Providing, fixing and installing manual rolling shutter having made out of 2mm interlocking lenses either of honeycomb or perforated profile coupled together with horizontal aluminium section tubes complete with M.S. Guide complete with bottom rails and brackets made from M.S. sheet, with fitting accessories in best workmanship. complete up to the satisfaction of the Architect. Rate including all the tools, tackles, hardware and consumable items etc.	7	sq.m.		
2.0	**PANELLING**				
2.1a	**LAMINATE PANELING**				

	Providing & fixing Paneling (Laminated) with framework of 45 x 25 mm GI sections (India Gypsum) @ 600 mm c/c in both directions, finished with 12 mm thick fire retardant plywood conforming to IS: 5509. With one side painted with approved primer and fixing of 1.0mm thick. decorative/High gloss/ textured laminate in two colour with skirting in mattaic laminate on other side. Paneling to have 75 x19mm steam beech wood molding on top, finish with PU mat finish paint/ malamine polish of approved colour. Paneling to include provision of extra framework as necessary for skirting and making cut-outs for electrical switch plates, switch boxes, use of flexi ply required for nitch etc. making provision for laying conduits as per drawings & directions etc. complete to the satisfaction of the Architect /direction of Engg-in-charge.(Base price of laminate to be used to be Rs. 45/ Sq.ft.).	118.00	Sq.Mt.		
2.1b	Providing & fixing Paneling (veneer basic price Rs.150/-sft.) with framework of 45 x 25 mm GI sections (India Gypsum) @ 600 mm c/c in both directions, finished with 12 mm thick fire retardant plywood conforming to IS: 5509. With one side painted with approved primer and other side 4mm thk. Veneer sheets fixed of approved shade, pattern ,make finished with 3 or more coats of melamine polish as per directions. Rate to include p/f 12 mm wide SS strip at joints of veneer as per detail attached and complete in all respect as per satisfaction of engineer incharge..	30.00	Sq.Mt.		
2.2	**LACQUER GLASS**				
2.2 a	Providing & fixing Panelling (toughen Lacquer Glass) with frame work with 45 x 25 mm GI sections (India Gypsum) @ 600 mm c/c in both directions, finished with 8mm thick. HDF board. The board to be covered with 6mm thick extra clear back painted toughened lacquered glass of Saint Gobin or equivalent approved make , of approved shade complete as per detail drawing and to the satisfaction of the Architect /direction of Engg-in-charge. Basic price of glass 300/-sq.ft.	28.00	Sq.Mt.		
2.2b	P/F 6mm thick extra clear back painted lacquered glass in panels (of Saint Gobin or equivalent approved make) , of approved shade over solid partition , by replacing 12mm ply with 6mm ply and fixing 6mm thk. toughen laquer glass over it . Complete as per detail drawing and to the satisfaction of the Architect /direction of Engg-in-charge.	15.00	Sq.Mt.		
2.3	**WALL PAPER**				
2.3 a	Providing and fixing (including base preparation) approved high quality decorative, completely strippable, non- woven, environment friendly wall paper/wall covering of minimum weight 250 gms as per selected design, model , shade, colour, steady and good impact resistance, good breathability, washable, no deformation, no shrinkage and no air gap after decor. Base Price of wall paper to be used to be Rs..65 / sq.ft.).	9.00	Sq.Mt.		

2.3 b	Providing & fixing Paneling with framework of 45 x 25 mm GI sections (India Gypsum) @ 600 mm c/c in both directions, finished with 12 mm thick BWR plywood conforming to IS: 5509. With one side painted with approved primer and other exposed side to have base preparation for wall paper. Paneling to include provision of extra framework as necessary for skirting and making cut-outs for electrical switch plates, switch boxes, etc. making provision for laying conduits as per drawings & directions etc. Paneling shall be finish with by Providing and fixing approved high quality decorative, completely strippable, non- woven, environment friendly wallpaper/wall covering of minimum weight 250 gms as per selected design, model, shade, colour, steady and good impact resistance, good breathability, washable, no deformation, no shrinkage and no air gap after decor. Base Price of wall paper to be used to be Rs. 65/ sq.ft.).	23.00	Sq.Mt.		
2.4	Supply of Aluminum Skirting Designed to be installed on wall, partitions and paneling on top of all kinds of flooring Installed using screws, to camouflage the rivet points. A capping strip is provided either in PVC of matching colour or aluminum. Supplied with pre-drilled holes and protection tape, which is removed after completion, Matching corner guards are provided with the profiles	60.00	RMT.		
3.0	**FALSE CEILING**				
	Item includes providing False Ceiling in plane, curve shape and design. Suspending system and frame work shall match layout of A.C. ducts / grills, electrical / fire protection wiring / fixtures, return air grills etc. Rate to include provision of extra frame work, necessary scaffolding needed due to layout of other utilities referred above and fixtures etc.				
3.1	Providing and fixing Gypsum Board False Ceiling with INDIA GYPSUM ULTRA main ceiling sections at 1200 c/c and cross members at 450 c/c of INDIAN GYPSUM. The grid work to be suspended from ceiling with hangers at every 1200 c/c in both directions. The Framework to be as per manufacturer's specifications. 12.5 mm thick. Tapered edge gypsum plain board conforming to IS: 2095- (Part I) : 2011. Gypsum board to be screwed to the frame of suitable size as required , including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes , finishing with jointing compound in 3 layers covering up to 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also included cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed,necessary frame work including cove, curve designs, lift, scaffolding ,along with final finish 3 or more coats of plastic emulsion paint etc. all complete as per drawings, and direction of the Engineer in Charge	224.00	Sq.Mt.		

3.2	P/F cove in gypsum board in curve/straight shape as per the attached drawings. Extra for making of Various type of cove with vertical surface in false ceiling complete in all respect as per the specification mentioned above in item no. 3.1 and as per satisfaction of engineer incharge. Running length in plan of cove will be considered for payment nothing extra for vertical sections.	160.00	Rm		
3.3	Providing and fixing False Ceiling with Mineral Fiber Acoustic Ceiling Tiles of Armstrong/ USG/ Boral with MICROLOOK edges and having noise reduction properties laid on exposed grid system with 15mm wide Silhouette type T-section flanges of white colour, main runners spaced at 1200 mm c/c securely fixed to the soffit of structure with approved hangers at 1200 mm maximum c/c. Flush fitting 1200 mm crossed tees to be interlocked between main runners at 600 mm c/c to form 1200 x 600 modules. 1200 mm cross tees to be crimped. 600 x 600 module to be formed by fixing 600 mm long flush fitting cross tees centrally between the 1200 cross tees. Ceiling tiles of Dune Supreme of size 600 x 600 x 16 mm (thick.) to be placed in the grid. Rate to include making necessary cut-outs or openings for light fixtures, air conditioners and other utilities etc. complete to the satisfaction of Architect/ Engineer.	178.00	Sq.Mt.		
3.4	WOODEN LAMINATED CEILING				
	Providing & fixing Tounge & Groove Wooden Laminated False Ceiling of size- 190 mm X 2440 X 11 mm in true horizontal level suspended on interlocking White/Black 'T'-Grid hot dipped galvanized iron section of 0.30 mm thick (galvanized @120 gsm) comprising of main T runners of 24 x32 mm of length 3000 mm. The second 'T' should be hanged at an Interval of 450 mm from first main'T'. Suspension of 'T'Grid from ceiling using galvanized mild steel item (galvanised@80gsm) M-6 dash fasteners, 6 mm diameter fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 600 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size 22 mm x 22 mm X 3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The Wooden Panel made of High Density Fiber Board (HDMR) Substrate with Pre-Laminated facing as per the approved Shade/species and finish and a Melamine balancing layer over the reverse side. The density of HDMR board should be more than 800kg/m3 . The HDMR board should be passed through vertically flammability test (UL94) & should be tested as for Anti-Fungal. The work shall be carried out as per specifications, drawings and as per directions of the Engineer-In-Charge. Make: Armstrong / Anutone / Gyptech / Saint Gobain.	12.26	Sq.Mt.		

3.4	Providing and fixing trap doors in the false ceiling made out of lightweight aluminium with T-frame (25x20 mm) all around and white baked enamel painted finish . Complete in all respect including locks, stainless steel cam latch, piano hinge and weather resistant Gasket all around	12.00	Sq.Mt.		
3.5	Providing and fixing U shaped Wooden Pelmet at end of false ceiling along glass for fixing blinds 4” to 6” height in 18 mm thick. Fire proof ply, complete laminated with 1 mm laminate all sides of approved shade. Rate to include all accessories for fixing of pelmet complete in all respect .	33.53	RMT.		
4.0	**P.O.P. and Painting on Walls**				
	Internal walls: White Matte Luster Paint is used for internal walls				
	Make and shade: Royal Luster Asian Paints - Morning Glory – 0765 or equivalent make.				
	All edges, furniture, floors, windows, doors, partitions, glass, hardware, lock, fittings, light fixtures and fittings, speakers, ledges, granite marble frames, doors, back and side units i.e all furniture, electrical, plumbing, civil, aluminium, AC grills etc. shall be properly covered with newspapers, non sticky abro tape, plastic covering, tarapaulin, card boards etc. as found suitable for respective surfaces upto the satisfaction of the Architect /bank and the same shall be totally covered / secured and taken care of so as to avoid any scratches, dents or stains etc.				
	Incase above mentioned covering is not done properly to the satisfaction of the Architect/bank, it will be at the Contractor’s risk to clean the surface at no extra cost and extension of time period.				
	Erecting scaffolding at all levels, preparing the surface by rubbing the surface by sand papers of different grade, removing all dirt, smoke, grease, loose plaster etc. if any from the existing surface cleaning the surface thoroughly and removing all the dirt from the surface. Providing and applying three coats of approved quality luster/ acrylic emulsion paint over the required number of coats of approved cement primer in all internal walls all complete including carrying out of necessary surface preparation and smoothening of surface with Birla white putty (3 COATS) as per manufacturer’s specification and finished in plain/ clear/ smooth/ rough surface as per site condition etc.				
	Specifications as directed by the Architect with luster/ acrylic emulsion paint of approved manufacturer of approved shade, colour and pattern and design. Rate shall include complete cleaning after completing the painting, removing painting marks and cleaning the surface. All complete as directed by the Architect/bank.				

4.1	P/A P.O.P. on internal wall, average thickness 9 mm with line, plumb and level, surfaces for the smooth base of paint work. Rates to including v groove in P.O.P at distance of 6' appx. c/c	94.20	Sq.mt.		
4.2	Wall painting with white Matte Luster Paint as per manufacture specification, including applying additional coats wherever required, to achieve even shade and colour.	185.80	Sq.Mt.		
	Make and shade: Royal Luster Asian Paints - Morning Glory – 0765 or equivalent make				
5.0	**FURNITURE WORK -**				
5.A	**TABLE AND COUNTERS**				
	All Tables/ Counters/Work stations to have 25 mm thk. Post form laminated MDF board and 19mm thk. commercial ply at sides , modesty and 1.0 mm thk. laminate finish on exposed vertical surfaces. 1.5 mm thk. Laminate on horizontal surfaces along with 0.8 mm thk. white laminate on inside surface,				
	TABLE TOP				
	Tabletop shall be made from minimum 25mmthick HMR grade post form laminated(of approved colour) MDF board (with Flex by Luvih is a 0.8 mm postforming laminate and edge moulding on both sides as per approval) of Marino or equivalent. Side flat edges shall have machine-applied minimum 2mm thick PVC edge beading . Top should have ivory /matching to top powder coated wire manager.				
	One true unit sample set at site with manufactures test certificate and again tested for work-men-ship and specification at site, as described procedure in drawing dimension and procedure.				
	MODESTY PANEL				
	The Modesty panel will be of 19 mm commercial ply with laminate both sides as per pattern. All exposed edges shall be lipped with minimum 2.0mm thick machine pressed PVC edge banding and other edges shall be finished with minimum 0.8mm edge banding. These shall be fitted in the region between Drawer Pedestal and Side Unit				
	DRAWER PEDESTAL				
	Drawer Pedestal to be made **from 12 mm thk.** commercial ply with 19mm thk. commercial ply FASCIA with 1.0 mm thk. laminate finish as per approval complete inside and outside .				
	It shall have two small upper drawers and one bigger filing drawer at bottom. All exposed edges shall be lipped with minimum 2.0 mm thick PVC edge banding. The back and sides of drawer units should be in same height as front .				
	The drawer movement will be on telescopic Channel. All telescopic channels should be of hettich and all hinges should be "ecomat clipon hinges" of Hettich for cabinet shutter.				

	Each pedestal unit will be provided with a centralized locking mechanism comprising of a multi-drawer lock fitted in the uppermost drawer fascia (of Godrej). All 3 drawer fascia shall be provided with stainless steel handles of approved design.				
	SIDE STORAGE UNIT				
	Side storage unit Outer casing shall be made from minimum 19mm thick commercial ply, complete laminated inside and outside, with top in 25 mm post form laminated MDF. All exposed edges shall be lipped with minimum 2.0mm thick PVC edge banding. The unit to have one 19mm thick. Horizontal shelf inside of commercial ply laminated with 1 mm laminate.				
	The unit will be provided with lockable shutters. **Shutter to have soft closing and anti-slam mechanism**. Shutters shall be having stainless steel handles of minimum 96mm length and locks for security, complete including all hardware, latches, hinges etc. as per drawing and instructions from project engineer.				
	CPU TROLLEY				
	Providing and placing heavy duty CPU trolley, (125mm to 240mm adjustable CPU trolley made out of MS with white powder coating and lockable castors)				
	KEY BOARD TRAY				
	Key board tray: Providing and installing 2'-6" wide, 16" deep wooden laminated all sides, keyboard, with heavy duty telescopic channels of Hettich make or equivalent as specified, made out 19 mm thick. Comm. Ply having 1 ¼" laminated edge at front and sides. contractor should display One true unit sample set at site again tested for work-men-ship and specification at site, as described procedure in drawing dimension and procedure				
5.1	**Executive tables**				
	P/F table front desk (2100 x900 X750) mm with side Rack /storage units produting out from front desk appx.800 mm as per design with CPU trolly, drawer pedestal and key tray etc complete as specified above . Table top , sides and side unit top in 19 mm thk commercial ply and should be finished with high density 12 mm thick Flexi Corian solid surface (make Dupoint / LG/Marino/Equivalent) and laminated inside as per specified above / as per drawing including all hardware , hinges etc.	1.00	NOS.		
5.2	**REAR STORAGE UNIT**				

	P/F rear storage unit at executive cabin 450 mm deep and 750 mm high . Units top in 19 mm thk. Commercial ply finished with 12 mm thk. Flexi corian solid surface complete in all respet as specified above in item description , including all hardware's, hinges, locks. Front elevation area will be considered for bill payment.	3.50	Sq.m.		
5.3	**OFFICER TABLE CATEGORY - 1**				
	P/F table size (1800 x 900 x 750) mm and side storage units (1000 X 450 x750)mm with readymade CPU trolly,Drawer unit and keyboard provision complete in all respect as specified in item description above and as per detail.	2.00	NOS.		
5.4	**OFFICER TABLE CATEGORY - 2**				
	P/F officer table size (1500 x 750 x 750) mm and side credenza /storage units (1000 X 400 x 750) with readymade CPU trolly,Drawer unit and keyboard provision complete in all respect as specified in item description above and as per detail.	7.00	NOS.		
5.5	P/F officer table size (1600 x 600 x 750) mm and side credenza /storage units (850 X 450 x 750) with readymade CPU trolly,Drawer unit and keyboard provision complete in all respect as specified in item description above and as per detail.	3.00	NOS		
5.6	P/F officer table size (1350 x 600 x 750) mm with readymade CPU trolly,Drawer unit and keyboard provision complete in all respect as specified in item description above and as per detail.	2.0	NOS.		
5.7	P/F officer table size (1200 x 600 x 750) mm with readymade CPU trolly,Drawer unit and keyboard provision complete in all respect as specified in item description above and as per detail.	3.0	NOS.		
5.8	**WORKSTATIONS**				
	Work station to include Divider above work top 50 mm thk. And 450 high , In aluminium frame of 25x50 mm with 12 mm thk. Pin up board with uphostry mounted above both side . Basic rate for upholstry 250/- meter. End of divider finished with teak wood moulding 2" x 1/2" , pu painted .				
	Work station to have 3" thk. divider partiiton (with aluminium frame and 12 mm ply both side finished with 1 mm laminate (plian/gloss/texture as per approval) below table top with provision of conduits running .				

5.8.1	Providing and fixing work station C1 of size (13'-2" x 4'-0" x 2'-6"ht.) Counter complete with sitting both sides, space for each person is appx. 4'-4 1/2 " x 2'-0" And one station provides six seats. Rate including chest of drawer, key board tray, cpu trolley etc. for each person complete in all respect as per specified in item nos. (5A), (5.7) and as per detail drawing attached .	2.00	NOS.		
5.8.2	Providing and fixing work station C2 of size (12'-0" x 4'-0" x 2'-6"ht.) with sitting both sides, space for each person is 4'-0" x 2'-0". And one station provides six seats. Rate including chest of drawer, key board tray, cpu trolley etc. for each person complete in all respect as per specified in item nos. (5A) , (5.7) and as per detail drg.	2.0	NOS.		
5.8.3	Providing and fixing work station C3 of size (8'-6" x 4'-0" x 2'-6"ht.) with sitting both sides, space for each person is 4'-3" x 2'-0". And one station provides four seats. Rate including chest of drawer, key board tray, cpu trolley etc. for each person complete in all respect as per specified in item nos. (5a) , (5.7) and as per detail drg.	3.0	NOS.		
5.8.4	P/F workstation with provision for each person size width appx. 1200 mm or as per layout plan , depth 600mm and height 2'-6" complete with readymade CPU trolly, Chest of drawer and keyboard provision as specified above in item description (5a) and as per detailS.	4.0	Rmt.		
5.9A	**Conference table**	1.0	NOS.		
	P/Placing conference table of size(1430 x 8000) of required shape with top made up of 25mm thick ISI mark commercial ply with 4 mm thk. Cedar/ teak veneer (basic rate Rs. 125/-sft.) (of Duro Nature Signature/ Green / equivalent) bottom of top laminated in approved matching shade . The under structure of table is made from 19mm ISI mark commercial ply along with both side 4mm pasted vineer. Veneer surface to be finished with clear PU polish of approved make (Asian/Sirka/Equavalent) as per manufacturer specifications . All edges are covered with steam beach/teak wood molding of size 1 1/2 " x 2.5" duly PU POLISHED AS ABOVE complete with proper provision of complete electrical system including 4 Nos. pop-up box in the table as per instruction of incharge. The rates are inclusive of providing & fixing intermediate support at joints of table desk. . complete in all respect as per drawing and instruction of engineer incharge				
5.9B	**RECEPTION TABLE**	1.0	NOS.		
	P/F two level table at reception size (2100 x 700) height 750 of work top and additional apron of height 1050 and depth 150 and width 2000mm in curve shape as per design , complete in 19 mm comm. Ply. Front, top and exposed side of table to be finished with 12 mm thick. Flexi Corian solid surface (make Dupoint / LG/Marino) in two or more colour with gloss finished. Rest internal area below work top to be finished with decorative/high gloss/plain 1mm thk. laminate . complete in all respect including drawer unit, keyboard provision inclusive of hardware, latches, handles, locks, etc. as above specified / as per drawing and as approved by Architect.				

6.0	**STORAGE CUPBOARDS UNIT**				
6.1	**LOW HEIGHT STORAGE UNIT 18" DEEP**				
	Providing and Placing storage cabinet 450 mm depth and 750 / 1200 mm high made out of 19 mm thick Commercial plywood of approved make, back covered with 8 mm commercial plywood, duly painted with anti-termite paint (on outer face) . Item to including complete lamination of 1 mm thk laminate inside and outside(including back) and the fixing of shelves at 400 mm to 450 mm c/c .	55.00	Sq.Mt.		
	Top shall be made of 25 mm thk. post form MDF Board of approved shade with edge moulding as per approval, and flat edge of top should be sealed with 2mm thick pvc beading . Cabinet to be provided with laminated shutters at front out of 19mm thk. commercial ply. The width of each shutter shall not exceed 18”. The exposed edge of ply should be sealed with 2 mm pvc beading/tape. The rates are all inclusive of necessary hardware SS multipurpose lock from Godrej , hinges(Ecomat from hettich) tower bolt, SS handle , Magnetic catcher, of approved design. Complete in all respect.The Front elevation area shall be considered for payment.				
6.2	Providing and fixing **RCC Counter** 75mm thk. with 8mm dia reinforcement TMT bars@ 150 c/c both ways. The concrete to be used to have 1:2:4 mix (1 cement: 2 coarse sand: 4 stone aggregate 12mm nominal size). Item includes making opening for wash basins, sink, necessary scafollding, curing and finishing in 12mm thk. plaster on under side. Item also includes providing and fixing 18mm thk. granite stone on top and on front edge of the counter. The granite to have opening for wash basin/ sink with moulding around the opening and also at leading edge etc. complete as per instructions of Architect/ Bank's Engineer.	2.40	Sq.Mt.		
6.3	P/F pantry cabinet under plateform, in 19 mm thick. HDMR Waterproof ply . Cabinet to have top row of drawers with cutlery tray of 550 mm width in one drawer and bottom shutter with provision of shelf inside, complete laminated inside with 0.8 mm thick laminate and outside with 1 mm thick. High gloss laminate of approved shade, complete in all respect including 2 mm PVC edge binding tape(at all exposed surfaces) of matching shade , hinges, Hardware, latches, magnetic catchers, telescopic channel, duly painted at back with anti-termite paint etc. of approved make.	2.32	Sq.Mt.		

6.4	Providing and fixing 1 No. Stainless Steel Kitchen Sink (Jayna, Nirali) single bowl 510 x510mm glossy as per I.S. 13983 with C.I. brackets, waste jali, down take pipe/bottle trap etc. including painting of fittings and brackets, cutting and making good the walls and counter wherever required etc. complete as per instructions of Architect/ Engineer in charge.The Front elevation area shall be considered for payment.	1.00	No.		
6.5	Providing and fixing **Over Head Storage** 300 mm deep made of fire safe plywood 19 mm thick. car case finished with 1mm thick. High gloss laminate off approved shade outside and 0.8 mm thick Plain laminate inside. Shutter should be provided with soft closing hinges (Hettich/ Haffle/ Dorma) & glass shelves inside. Item to be inclusive of 2 mm PVC edge binding tape of matching shade at exposed edge, all accessories/hardwares, locks, soft close hinges etc. complete. Complete to the satisfaction of Architect/Engineer. The Front elevation area shall be considered for payment.	1.72	Sq.Mt.		
7.0	**MISCELLANEOUS WORK**				
7.1	WINDOW BLINDS roller				
	Providing & fixing of Blackout Roller Blinds (Vista Levelor / MAC/ DACK) of approved shade, texture and fabric including all associated accessories, heavy duty chain driver pulley etc. complete in all respect as per manufacture specifications and to the satisfaction of Architect/Bank's Engineer. Base price of the fabric be used Rs. 125/- sq.ft.).	60.00	Sq.Mt.		
7.2	Supply and fixing of Dual layer Zebra roller blinds, (Vista Levelor / MAC)of approved shade, texture and fabric including all associated accessories heavy duty chain driver pulley etc . FABRIC shall be constructed from spun-bonded polyester fibre, complete in all respect as per manufacture specifications and to the satisfaction of Architect/Bank's Engineer.	20.00	Sq.Mt.		
7.3	DIGITAL GLASS FROSTING FILM (3M)				
	Providing and fixing Digital Glass Frosting Film (3M) for frosting as per design in all shapes including curve shapes etc. complete to the satisfaction of Architect/Bank's Engineer.	32.38	Sq.Mt.		
7.3	Providing and fixing 12 mm thick , 1500 wide and 300 deep toughen glass shelves with S.S. fitting as required for display of things complete in all respect .	4.00	Nos.		
7.4	Providing and Supplying S.S. Dustbins (Dry), avg. 300 mm dia. Foot Pedal Bin of avg. height appx.400 mm perforated matt finish, with all turned, well-formed and moulded edges at the bucket rim. Item to include sample approval from Architect/Bank's Engineer.	12.00	Nos.		
7.5	Dustbin for toilet in SS solid matt finish with rest specifications same as item no. 7.4	3.00	Nos.		
7.6	Plastic Dustbin for pantry (Foot Pedal Bin) size approx. 400 mm dia and appx. 500 mm high of Supreme /Aristo/ Equivalent	1.00	Nos.		

7.7	Various Direction signages of exit and washroom identification with LED glow panel and proper fixture for installation and connection 20"x9"size.	4.00	Nos.		
7.8	Supply and application of fiberglass wool blanket/roll having density 20 Kg/m3 and thickness 50mm inside drywall partition cavity for better sound isolation .The insulation should be appplied with insulation holder or stell wires. NRC value of the core fiberglass wool insulation boards should be 0.9 .Thermal conductivity of the insulation should be less than 0.038 W/m.K (at 25 deg C), and thermal resistance should be more than 1.25 m2.K/W. The detail application methodology may vary site to site and should be as per satisfaction of the Engineer-in-charge	18.00	sq.m.		
8.0	**EXECUTIVE TOILET AND PANTRY WORK**				
8.0.1	**Water closet**				
	Providing / fixing, testing and commissioning, star-white glazed vitreous China European type water closet, wall mounted, manufacture (Hind- ware Italian collection ,ELEGANCE cat. 20109 / or equivalent make /range) with all fitting, fixtures, soft closer seat cover, uPVC Connector, Rubber Seal etc. complete including cutting and making good wall, floors wherever required.	1.00	Nos.		
8.0.2	**Concealed Cistern**				
	P/F, testing and commissioning of concealed flushing cistern of Hind ware, “Concealo Neo(80mm) or equivalent make/range, with flush plate Model “CUTE”, including wall mounted frame, complete in all respect, as per requirement.	1.00	Nos.		
8.0.3	**Wash Basin counter mounted**				
	Providing and fixing vitreous China countertop mounted Wash Basin white (Hind ware round starlet cat. No. 10052 model or equivalent make /range) 49 cm dia. With C.I./ M.S. brackets if required, 32 mm C.P. brass waste of standard pattern, bottle trap, etc. including cutting and making good at counter/vanity /stone top wherever required etc. complete as per instructions of Architect/ Engineer.	1.00	Nos.		
8.0.4	Providing, fixing, testing and commissioning **Wash Basin mixer with Sensor** of (Jaquar model SNR-35019PMPK kubix prime or equivalent make /range) as per approval along with all necessary fittings /stainless steel connection pipes for angle valve to make it workable as may be required, complete as per instructions of Architect/ Engineer.	1.00	Nos.		
8.0.5	**Water less urinal**				
	Providing and fixing, testing vitreous China water less urinal Astute MODEL OF PARRYWARE / Equivalent , having standard size C.P. brass pipe and clamps with bottle trap & waste fittings including brackets,cutting and making good the walls and floors wherever required etc. complete in all respect as per manufactures specs.	1.00	Nos.		

8.0.6	Providing & fixing CP brass Angle Valve with flange (Jaguar/Kohler/ Equivalent) of approved model along with all accessories as may be required complete as per instructions of Architect/ Engineer. Basic price to be Rs 1000/-	6.00	Nos.		
8.0.7	Providing, fixing C.P. Grating complete. (Chilly, Camry Make) Including cutting hole in stone/tile , including grouting's, 125/100 mm dia. Weight not less than 100grams.	3.00	Nos.		
8.0.8	Providing and fixing long body Bib cock with wall flange for sink (Jaquar model COP-107PM/ or equivalent approved make/range) along with all accessories as may be required complete in all respect.	1.00	Nos.		
8.0.9	Providing, fixing, testing, Health Faucet along with one-meter-long flexible tube crome finish and hanging hook of Jaquar allied series ALD579 or equivalent make/ range)	1.00	Nos.		
8.0.10	Providing & fixing wall mounted Toilet Roll Holder Jaquar model I-1151N/ or equivalent approved make/range) complete in all respect.	1.00	Nos.		
8.0.11	Providing, fixing, testing and commissioning of ISI mark vertical geyser 6 liter capacity (Crompton / Havells/ equivalent make) Rates to include stainless steel connection pipes from angle valve to geyser, complete in all respect.	1.00	Nos.		
8.0.12	Providing and fixing Sensor operated hand drier (ABS finish) to be operated with 220 volts, single phase, with fully hygienic condition, with all accessories including cutting and making good the walls, wherever required complete as per instructions of the engineer-in-charge.	1.00	Nos.		
8.0.13	Providing and fixing wall mounted paper towel dispenser of stainless steel, capacity 400-600 C/Z towels, complete in all respect. model PTD-SAP-DT0106CS of Jaquar or approved equivalent make/range)	1.00	Nos.		
8.0.14	Providing and fixing automatic shop dispenser Jaquar model SDR-BLC-DJ0160AS or equivalent make /range	1.00	Nos.		
8.0.15	Providing and fixing **auto hand sanitizer Dispenser**, with built in sensor of capacity 5 liters make Puremist / equivalent make/range	1.00	Nos.		
8.0.16	Providing and fixing robe hook (TWIN TYPE) complete in all respect. Jaquar model AQN-7761 or equivalent make /range.	1.00	Nos		

8.0.17	Providing and fixing mirror of superior glass (of approved quality) (2'-0" dia) on wall , with 6mm thick. Mirror with beveled edges fixed over 6mm waterproof ply with wooden /pvc frame 25 x25mm all around, finished in duco paint, along with C.P. brass screws and washers, all accessories as may be required complete as per instructions of Architect/ Engineer.	1.00	Nos.		
8.0.18	Providing and fixing mirror of superior glass size 2'-6" x 4' complete as specified wbove in item no. 8.1s	1.00	Nos.		
8.0.19	Vanity for toilet				
	P/F cabinet 600 deep in 19 mm thick. BWR Waterproof ply with 18 mm thick. Granite, pre polished and pre moulded/ equivalent at top (Base price Rs. 160/-sq.ft.) Joints to be sealed with epoxy with matching pigment up to complete depth. Cabinet to have shutter with provision of shelf inside, complete laminated inside with 0.8 mm thick laminate and outside with 1 mm thick. High gloss laminate of approved shade, complete in all respect including 2 mm PVC edge binding tape of matching shade at exposed edge,soft closing hinges, Hardware, latches, etc. of approved make. The Front elevation area shall be considered for payment.	0.60	Sq.mt.		
8.0.20	Providing and fixing frameless 12 mm thk. Toughen frosted glass partition side of wash basin counter rectangular shaped (size- height=1650, width=750), fitted with SS fittings at wall and floor, complete in all respect.	1.00	Nos.		
9.0	**Floor and wall tiles**				
Note	The measurement to be on sq. mt. basis of the plan area of flooring, Rates are including				
	Protection of newly laid floor during interior work				
	Rate should be inclusive of the cost of removing this protective layer, (after the work is completed) carrying all debris out of site and dumping it to municipal authorized				
	dumping ground, cleaning the entire covered flooring area. complete in all aspect.				
9.1	Providing and laying vitrified decorative type tiles of different sizes (kajaria/ johnson/ NITCO) thickness to match manufacturers specifications of approved make, shade and pattern having water absorption between 0.08% to 2.0% for dado in required position laid on a bed of 1:4 cement mortar including neat cement float, Rate shall include laticrete epoxy grouting . complete in all respects as directed by the Architect. Base price of tile to be used to be Rs. 60 /- sq.ft.)	23.09	Sq.Mt.		

9.2	Providing and laying premium Vitrified anti skid floor tile of sizesappx. 600x600 (with water absorption less than 0.08% and conforming to IS : 15622) of approved make, and shade having thickness as per manufacturer's specifications in single shade. The tiles to be fixed after levelling of the existing floor as may be required with cement mortar bed 1:4 (one part cement & 4 parts coarse sand) and then fixing the tiles with compound/ adhesives, including grouting the joints with white cement and matching pigments of approved shade to the full depth, complete as per direction of Engineer-in-charge.	5.00	Sq.mt.		
	(Base price of tiles to be used to be Rs. 60/ sq.ft)				
9.3	Civil work for PANTRY				
	Providing/laying half brick Masonry wall with common burnt clay F.P.S(non-modular) bricks of class designation 7.5 including with cement mortar 1:4(1 cement :4 coarse sand) including , P/Applying cement plaster 15 mm thick. in 1:4 (1 cement, 4 fine sand) on it , including lead, lift, wastage, cleaning etc. completes in all respect wherever required.	20.91	Sq.mt.		
10.0	**PLUMBING WORK**				
	Plumbing works includes cleaning of surface as per instructions. Item also includes all necessary connections with existing pipes, manholes and service lines, through core cutting etc using all required accessories and necessary lesioning with building authorities.				
10.1	**UPVC PIPES:**				
	Providing and laying Heavy Duty UPVC pipes of approved make in floor, vertical/horizontal position including covering the same with concrete having 1:2:4 mix (1 cement: 2 coarse sand: 4 stone aggregate 12mm nominal size) along with water proof. The item includes all other accessories such as floor traps, bends, socket, tees, junctions, clamp, etc. complete .as may be required with all joints to be sealed with solution, necessary digging/ chasing /holes and covering the same properly, joint testing, etc. complete as per instructions of Architect/ Engineer.				
10.1.a	Same as above but for 110mm Dia nominal bore pipe.(with 6 Kg/cm2 pressure	40.00	Rmt		
10.1.b	Same as above but for 50mm Dia nominal bore pipe.	8.00	Rmt		
10.2	**CPVC PIPES**				
	Clear length will be measure (meter basis) for measurement purposes.				
	Providing and laying Chlorinated Polyvinyl Chloride (CPVC) pipes of approved make having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings and fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement including the cost of cutting chases, making good the same and including testing of joints at 7 Kg/ Sq.Mt. pressure with pressure pump				
	(Internal Hot water supply pipe)				

	Providing and fixing thermal insulation over hot water pipes in chase with 6mm thick thermal insulation tubing, using elastomeric flexible material having hermetic blister closed cell structure of expanded synthetic rubber having densityof60-90Kg/m3 over pipes of following sizes including all required accessories complete as per Manufacture's specifications and finishing it as per site requirement with Cement Plaster.				
	Same as above but for 12 mm dia nominal bore for concealed internal piping	25.00	Rmt.		
	HOT WATER SUPPLY. (Internal Hot water supply pipe)Same as above but for 12 mm dia nominal bore for concealed internal piping.	8.00	Rmt.		
11.0	**Dismantling work**				
	Note: Dismantling to be done in parts as per the instructions with proper support and covering of other areas from dust and falling debris, coordinating with other contractors/ agencies				
	Item includes removing, cleaning, stacking the usable material at designated place and disposing off unserviceable material from the premises up to all leads and lift to space / dumping yard area marked by local authority. Item also includes taking permissions from the concerned departments/ building authority as required.				
	Including costs of all necessary measures, safety features, nets, scaffolding, lead, lift, cleaning after disposal etc.				
	All material obtained from dismantling or demolition shall be the property of the owner unless otherwise specified and shall be kept in safe custody until they are handed over to the engineer -in charge.				
	Any damage to property, structure, expansion joint, shall be repaired/made good by the contractor at his own cost no payment shall be made in this regard to contractor.				
11.1.a	Dismatling of existing pantry , internal slab and tiles excluding plumbing connections , brick work for creating opening for record room complete in all respect as per proposed layout plan .And disposing the unserviceable malba from site day-to day basis .	1.00	No.		
	Total Carried out to summary				

SUMMARY						
						Supply & Installation INR
A	**SUB DISTRIBUTION PANELS**				**Rs.**	
B	**DISTRIBUTION BOARDS**				**Rs.**	
C	**RACEWAYS AND CABLE TRAYS**				**Rs.**	
D	**CABLES, MAINS & SUB MAINS**				**Rs.**	
E	**EARTHING**				**Rs.**	
F	**POINT WIRING**				**Rs.**	
G	**CONDUITING FOR TELEPHONE, COMPUTER & CONDUITING AND WIRING FOR T.V. SYSTEM.**				**Rs.**	
H	**SUPPLY & FIXING OF LIGHTING FIXTURES**				**Rs.**	
J	**ADDRESSABLE FIRE ALARM AND PA SYSTEM**				**Rs.**	
K	**NETWORKIG SYSTEM**				**Rs.**	
	GRAND TOTAL INR					

Sl No..	Description	Unit	Qty.	Supply & Installation	
				Rate In Rs.	Amount In Rs.
A	**SUB DISTRIBUTION PANELS**				
1	**Sub Distribution Panels**				
	Design, manufacture, supplying & installing at site in positioning, connecting, testing and commissioning of the following cubical type, dead front, 2mm thick sheet steel enclosed, free standing indoor type extendible Sub Distribution Panel with vermin proof hinged lockable doors for each compartment provide bus bar interconnections for incoming and outgoing including feeders earthing and painting and as per specifications.				
a	**The Light and Power Panel shall consists of :**				
	MAIN INCOMER				
	1 No 100 Amp 4 pole Manual Change over switch & 1 No. 100 A TPN MCCB (25KA/1 sec)(O/C, S/C,E/F) and neutral isolation link 50% of rated current. Terminals suitable to receive 1 x 3.5c x 50 sq. mm Al cable connection on one side and Busbar connection on the other side.				
	BUSBAR Section				
	200 amps TPN busbar chamber of suitable length with aluminium busbars. All busbars and interconnections shall be of suitable size aluminium strips current density of copper shall not be more than 0.8 Amps/ sq.mm.provide 50% capacity for neutral bus bar.				
	INDICATING PANELS				
	3 nos phase indicating lamps (LED type) each backed up with MCB and switch shall be provided for each incomer.				
	Provide on/off indication lamp on incomer				
	Provide Intelligent Panel Meter - with RS485 for all incoming feeder				
	OUTGOINGS				
	3 Nos 63 A FP MCB (10 kA), terminals suitable to receive AR Cable on one side and Busbar connection on the other side.				

	5 Nos 25/32 A FP MCB (10 kA), terminals suitable to receive AR Cable on one side and Busbar connection on the other side.				
	1 Nos 63 A DP MCB (10 kA) terminals suitable to receive AR Cable on one side and Busbar connection on the other side.				
	3 Nos 25/32 A DP MCB (10 kA) terminals suitable to receive AR Cable on one side and Busbar connection on the other side.				
	The SDB panelas described above and specifications complete	Set	**1**		
2	Providing & fixing in position 1000 mm wide , Electrical Insulating Mats as per IS 15652:2006, 2mm thick, suitable up to 3.3 KV , fire retardant,no effect of acids, alkalies and transformer oils, moisture proof, high tensile strength and texture finish / cloth impression (Anti slip , marking on top) .	RM	**2**		
3	Supply & fixing in position approved shock treatment chart written in English, Hindi and Local language. These charts shall be framed in wooden frame & covered with clear glass.	Nos.	**1**		
4	Supply & fixing in position the best quality danger notice boards of approved shape & size as reqd. by the local Electrical Inspecting Authority written in English, Hindi & local language.	Nos.	**1**		
	TOTAL CARRIED OVER TO SUMMARY				

B	**DISTRIBUTION BOARDS**				
1	Supply,inginstalling ,connecting testing and commissioning of the following double door 1/4 rows vertical type 1.6 mm thick and 1. 4 thick door sheet steel enclosed fully recessed type, TPN Miniature Circuit Breakers Distribution Boards dust proof, verm-in proof, with hinged and lockable doors complete with DP MCB's and inter-connection with copper wire , insulated copper bus bar , cable glands-/conduit entry bushes, bonding to earth and paint-ing. Also provide separate neutral busbar for each phase. Provide separate Earth Links for each phase. Use brass thimbles for connections of all wires. 1 row for single phase and 4 rows for 3 phase. Provide separate 4 way 63 A main neutral link also. The phase busbar links shall be factory pre insulated.				
1	**Light & Power Distribution Board**				
a	8+2 Way TPN DB, each phase consisting of 6 Nos. 10/20 AMP SP MCB's and controlled by one number 100 mA sensitivity 40 AMPS DP RCCB backed up with 1 no 40 Amps 4 pole MCB.	Nos	**1**		
b	10+2 Way TPN DB, each phase consisting of 8 Nos. 10/20 AMP SP MCB's and controlled by one number 100 mA sensitivity 63 AMPS DP RCCB backed up with 1 no 63 Amps 4 pole MCB. (L&P DB)	Nos	**1**		
c	10+2 Way SPN DB, consisting of 8 Nos. 10/20 AMP SP MCB's and controlled by one number 100 mAsensitivity 40 AMPS DP RCCB backed up with 40 Amps DP MCB. (For Emergency light)	Nos	**1**		
2	**UPS Distribution Boards (All MCB's in UPS DB's should be D Curve)**				
a	8+2 Way TPN DB, each phase consisting of 6 Nos. 10/20 AMP SP MCB's and controlled by one number 100 mA sensitivity 40 AMPS DP RCCB backed up with 1 no 40 Amps 4 pole MCB.	Nos	**1**		

3	Supply, installation, testing and commissioning of sheet metal enclosure with 63 A 4P MCB. This shall include cable entry boxes both for incoming cables) For 10 KVA UPS.	Nos.	**1**		
4	Supply, installation, testing and commissioning of sheet metal enclosure with 63 A DP MCB. This shall include cable entry boxes both for incoming and outgoing cable) For 10 KVA UPS.	Nos.	**1**		
5	Supply, installation, testing and commissioning of sheet metal enclosure with 32 A DP MCB. This shall include cable entry boxes both for incoming and outgoing cable)	Nos.	**2**		
	TOTAL CARRIED OVER TO SUMMARY				

C	**RACEWAYS AND CABLE TRAYS**				
1	Fabricating supplying to site of installation, installation on **ceiling/ surface 1.6 mm** thick G.I raceways of height 50 mm and 1.6 mm thick openable cover, totally enclosed, the joints between two lengths of channels or between channel and junction box shall be joined together with 3 mm thick G.I coupler plates to make it dust and water proof. The cost shall including all supporting and fixing accessories including dash fasteners. The maximum spacing of the supporting arrangement shall be 1. 2 M.				
a	100 mm (wide) x 50 mm (height)	RM	**35**		
2	Fabricating supplying to site of installation, **Junction boxes** for Ceiling raceways made from 1.6 mm thick , with 1.6 mm thick G.I. including providing neoprene gaskets between the cover and the junction box, cadmium plated flat/round head screws, height as per site condition,totally enclosed. Proper cutouts shall be made in the side walls for raceway entry wherever required. The junction box shall be all side walls should be welded expect top cover and all side walls shall have suitable size of rectangular knock out holes for taking raceways / conduits as required and not a complete cut out. The top cover should be sealed with M Seal to make it dust and water proof complete as required etc.				
a	150 mm x 150 x 60 mm (height)	Nos.	**5**		
3	Fabricating supplying to site of installation, **in floor** including chase cutting of floor,leveling, refilling and making good the same from 1.6 mm thick and 2 mm thick cover pregalvanised G.I sheet, totally enclosed, height 40 mm . The two lengths of raceways shall be fitted with Collars , 50 mm wide, 3 mm thick , press fit type. The raceways shall be clamped to the floor slab with GI clamps , 3mm thick and shall be screwed to the floor slab. The joint between raceway and junction box will be made with GI flexible strip(3 nos), 3 mm thick, 4 inches long ,15 mm wide which will be nut bolted to the Junction box complete as required etc.				

a	250 mm (wide) x40 mm (height)	RM	**20**		
b	150 mm (wide) x40 mm (height)	RM	**50**		
c	100 mm (wide) x 40 mm (height)	RM	**40**		
4	Fabricating supplying to site of installation, **Junction boxes for floor** raceways made from 1.6 mm thick , with 2.0mm thick G.I power coated cover including providing neoprene gaskets between the cover and the junction box, cadmium plated flat/round head screws, height as per site condition,totally enclosed. Proper cutouts shall be made in the side walls for raceway entry wherever required. The junction box shall be all side walls should be welded expect top cover and all side walls shall have suitable size of rectangular knock out holes for taking raceways / conduits as required and not a complete cut out. The top cover should be sealed with M Seal to make it dust and water proof complete as required etc.				
b	200 mm x 200 x 60 mm (height)	Nos.	**30**		
c	150 mm x 150 x 60 mm (height)	Nos.	**20**		
d	50 mm x 50 x 60 mm (height)	Nos.	**10**		
5	Design manufacture , supply and fixing in position the cable trays of the following sizes for supporting 1.1 KV grade armoured/unarmoured aluminium /copper conductor cables. Fabricate the cable trays from perforated 1.6/2mm thick M.S. CRCA sheet duly galvanised with expansion coupler plates duly galvanised, with bolts, washer and nuts. Knock out holes for cable connections as per approved design. The tray should comply with the specification of NEC (National Electric Codes) and NEMA (National Electric Manufacturers Association). The steel should be as per IS:226 and galvanising as per IS :2629/BS 729/ASTM 123. The fixing of cable trays include necessary ceiling suspended / wall mounted supports fixed in ceiling with Fabricated Ms Angle supports,Ms C channel,Base plate etc, The rate shall include bends, angles, Ts, HITECH ROD and all accessories complete Supports Shall be provided at every 1200mm.				

	The cost of supports to be included. Supports must be welded to a square true ceiling base plate with arc welding, the base plate must be fixed to the true ceiling with 04 nos. of HILTI anchor fasteners. Supports must be made out of MS L angle type for cable tray width of 450mm and above. For Less than 450mm width tray support with hi-tech threaded rods & anchor fasteners. The maximum spacing of the supporting arrangement shall be 1. 2 M.				
a	150 mm wide x 40 mm x 1.6 mm thk	RM	**25**		
b	300 mm wide x 40 mm x 1.6 mm thk	RM	**15**		
	TOTAL CARRIED OVER TO SUMMARY				

D	**CABLES, MAINS & SUBMAINS**				
1	Supply and laying, effecting proper connec-tions, testing & commissioning of the following sizes of 1.1 KV armoured XLPE / unarmoured Cross linked polyethylene insulated, PVC sheathed (XLPE), conforming to IS: 7098 (Part-1)- 1988 (90 deg C) aluminium /copper conductor cables conforming to IS : 1554 and IS 694 for Flexible copper cable Part I - 1976 with latest amendments laid over MS supports in existing RCC ducts/ laid in ground /laid on Cable Trays including clamping the cables to sup-ports in an approved manner as required complete with all accessories.All cables shall have thermo setting insulation XLPE and low emission of smoke and corrosive gas when affected by fire				
1.1	**Armoured Aluminium Cable**				
a	3.5 c x 50 sq.mm 1.1 KV grade XLPE Insulated sheathed armoured aluminium conductor cable (L&P SDB)	RM	**30**		
b	4 c x 6 sq.mm 1.1 KV grade XLPE Insulated sheathed armoured aluminium conductor cable	RM	**100**		
1.2	**Armoured Copper Cable**				
a	4 c x 16 sq.mm 1.1 KV grade XLPE Insulated sheathed armoured copper conductor cable	RM	**30**		
b	3c x 4 sq.mm 1.1 KV grade XLPE Insulated sheathed armoured copper conductor cable	RM	**75**		
c	3c x 6 sq.mm 1.1 KV grade XLPE Insulated sheathed armoured copper conductor cable	RM	**70**		
d	1c x 10 sq.mm FRLS XLPE insulated flexible copper conductor cables	RM	**30**		
e	1c x 16 sq.mm FRLS XLPE insulated flexible copper conductor cables	RM	**30**		

2	Supplying and making of end termination for the following size of 1.1 KV XLPE insulated copper conductor armoured cables including providing heavy duty copper terminal crimping lugs, solder, insulation tape, approved sealing epoxy compound, double compression brass cable glands, effecting gland connec-tions and effecting terminal connections to the equipment complete as required. Use compression lugs and PG Threaded Nylon Flexible cable glands for single core flexible cables				
2.1	**Armoured Aluminium Cable**				
a	3.5 c x 50 sq.mm 1.1 KV grade XLPE Insulated sheathed armoured aluminium conductor cable	Sets	**2**		
b	4c x6 sq.mm 1.1 KV grade XLPE Insulated sheathed armoured aluminium conductor cable	Sets	**8**		
2.2	**Armoured Copper Cable**				
a	4 c x 16 sq.mm 1.1 KV grade XLPE Insulated sheathed armoured copper conductor cable	Sets	**4**		
b	3c x 4 sq.mm 1.1 KV grade XLPE Insulated sheathed armoured copper conductor cable	Sets	**4**		
c	3 c x 6 sq.mm 1.1 KV grade XLPE Insulated sheathed armoured copper conductor cable (Hub & Emg DBs)	Sets	**4**		
d	1c x 10 sq.mm FRLS XLPE insulated flexible copper conductor cables	Sets	**8**		
e	1c x 16 sq.mm FRLS XLPE insulated flexible copper conductor cables	Sets	**4**		
	TOTAL CARRIED OVER TO SUMMARY				

E	**EARTHING**				
1	Providing and fixing in position the following copper strips and wires including providing all fixing accessories and effecting proper connections				
b.	G.I. tape 25 mm x 6 mm	RM	**75**		
d.	GI wire 8 SWG	RM	**100**		
2	Supply and laying, effecting proper connec-tions, testing & commissioning of the following sizes of 1.1 KV armoured XLPE/ unarmoured Cross linked polyethylene insulated, PVC sheathed (XLPE), conforming to IS: 7098 (Part-1)- 1988 (90 deg C) aluminium /copper conductor cables conforming to IS : 1554 and IS 694 for Flexible copper cable Part I - 1976 with latest amendments laid over MS supports in existing RCC ducts/ laid in ground /laid on Cable Trays including clamping the cables to sup-ports in an approved manner as required complete with all accessories.All cables shall have thermo setting insulation XLPE and low emission of smoke and corrosive gas when affected by fire				
a	1c x 16 sq.mm FRLS XLPE insulated flexible copper conductor cables	RM	**150**		
b	1 x 10 Sq. mm FRLS XLPE insulated flexible copper conductor cables (Green Colour for UPS DB Sub-main Earthing)	RM	**50**		
c	1 x 6 Sq. mm FRLS XLPE insulated flexible copper conductor cables (Green Colour)	RM	**20**		
3	Supplying and making of end termination for the following size of compression lugs and PG Threaded Nylon Flexible cable glands complete with all fixing accessories as required				
a	1c x 16 sq.mm FRLS XLPE insulated flexible copper conductor cables	Sets	**4**		
b	1 x 10 Sq. mm FRLS XLPE insulated flexible copper conductor cables (Green Colour for UPS DB Sub-main Earthing)	Sets	**6**		

4	Supply, Installation, testing and commissioning of Maintenance Free Earthing of make Electrolytic Earthing comprising of type 'K' copper 2.4 mm wall thickness, hollow tube 10 feet long, 2.125 inches outer diameter completely filled with non hazardous metallic salts (Terrafill) to achieve an earth resistance of less than 1 ohms. Provide masonry chamber with concrete base, CI man-hole cover (cover to be heavy duty) with frame (300mm x 300mm) and make earth pit sign/ identifcation no in each earth station **for UPS & Server**	Nos.	**2**		
5	Supply, installation, testing and commissioning of sheet metal enclosed with vision glass door 250 x 150 x 125 (D) mm insulated earth distribution board with 1 nos. 32 x 6 mm copper tinned earth bars on SMC insulator suitable for 6/8 nos connections complete with all fixing accessories as required.	Nos.	**2**		
6	Supplying and laying of the following sizes of Heavy duty PVC Pipes below paved area including chase cutting and back filling. For earthing cables and Fiber cables				
a.	100 mm outer dia	RM	**15**		
	TOTAL CARRIED OVER TO SUMMARY				

F	**POINT WIRING**				
1	Wiring for the following light points with 3x1.5 Sq.mm FRLS PVC insulated stranded copper conductor wires in concealed MS conduit in F.ceiling/walls/ceiling as directed including providing and fixing of 6 amps flush type switches, 5 sided G.I. Boxes for housing switc hes and earth-ing complete as required.Rates are inclusive of 3 x 1.5 sq mm FRLS PVC insulated stranded copper conductor wires for circuit				
a.	**<u>First point</u>** controlled by one no. 6 amp switch.	Nos.	**35**		
b	Extra Loop light point in same switch	Nos.	**85**		
2	Wiring for the following light points controlled by MCB in DB (Cost of MCB has been taken elsewhere in the tender) with 3x 1.5 sq. mm FRLS PVC insulated copper conductor wires in concealed/exposed MS conduit as called for and earthing.				
a.	First point controlled by existing MCB in D.B. To first light for emergency light & Exit signage	Nos.	**3**		
b.	Additional light points in the same circuit	Nos.	**21**		
3	Wiring for 6/16 amps light plug outlets with 3 x 2.5 sq.mm FRLS PVC insulated copper conductor wires in MS conduit in ceiling/walls/floor as direc-ted incl-u-ding providing 6/16 amps flush type 5 pin socket and 16 amps switch with cover plate, 5 sided G.I. boxes for housing switches, sockets and earthi-ng complete as required. **(for general areas)**	Nos.	**20**		
4	Wiring for the Exhaust /wall fan points with 1.5 Sq.mm FRLS PVC insulated stranded copper conductor wires in concealed/exposed MS conduit in ceiling / walls as directed including providing Hexagonal fan Box , Electronic fan regulator, 6 amp switch, 5 sided G.I. Boxes, for housing the regulator and earthing complete as required.	Nos.	**16**		

5	**Wiring for Geyser points** with3 x 4 sq mm FRLS PVC insulated copper conductor wires in concealed MS conduit in F.ceiling/ walls/ Ceiling as directed including providing 16 amps flush type switch near the white board and 6/16 amps 6 pin socket near the projector in ceiling , 5 sided G.I. boxes for housing switches and 6/16 A 6 pin socket outlet , earthing and complete as required.(including body earth for GI boxes) (1 point per circuit)	Nos.	**2**		
6	Wiring for 16 amps power outlet points with 4.0 sq.mm FRLS PVC insulated stranded copper conductor wires in concealed/recessed MS conduit as directed including providing providing and fixing of 16 amps flush type switch and 6 pin socket with cover plate 5 sided G.I. boxes for switches and socket and earthing the third pin with 4.0 sq mm FRLS PVC PVC stranded copper wire complete as required (including body earth for GI boxes).				
a	One 16 Amps point per circuit	Nos.	**2**		
b	2nos 16 Amps point per circuit	Sets	**2**		
7	**Wiring for A/C outlet points with 4.0 sq mm** FRLS PVC insulated stranded copper conductor wires in MS conduit/wall/floor ducts as directed including providing 25 A socket with 25 amps SP MCB (Tiny Trip) 5 sided PVC Outlet Box for housing and socket and MCB and earthing with 2.5 sq. mm FRLS PVC insulated stranded Copper Conductor wires complete as required.	Nos.	**3**		
8	**Wiring for UPS/Raw plug outlets points** with three core, 2.5 sqmm FRLS PVC Insulated and PVC sheathed flexible cable with bright annealed electrolytic copper conductor , 1100 volt grade confirming to IS : 694-1990 with latest amendments, in existing Channels/ conduit in ceiling/walls/floor inclu-ding all cable termination accessories) Earthing of GI Box to be included. Colour Coding to be followed . For Worksation UPS and Raw power wiring				
a	**Primary point including circuit cables**	Nos	**45**		
b	**Secondry loop point in same circuit**	Nos	**126**		

9	**Wiring for UPS/Raw plug outlets points** with three core, 4 sqmm FRLS PVC Insulated and PVC sheathed flexible cable with bright annealed electrolytic copper conductor , 1100 volt grade confirming to IS : 694-1990 with latest amendments, in existing Channels/ conduit in ceiling/walls/floor inclu-ding all cable termination accessories) Earthing of GI Box to be included. Colour Coding to be followed . For Worksation UPS and Raw power wiring				
a	**Primary point including circuit cables**	Nos	**2**		
b	**Secondry loop point in same circuit**	Nos	**2**		
10	**Wiring for UPS/Raw plug outlets points** with three core, 4.0 sqmm FRLS PVC Insulated and PVC sheathed flexible cable with bright annealed electrolytic copper conductor , 1100 volt grade confirming to IS : 694-1990 with latest amendments, in existing Channels/ conduit in ceiling/walls/floor inclu-ding all cable termination accessories) Earthing of GI Box to be included. Colour Coding to be followed .	RM	**45**		
11	**Providing and fixing of 1 Nos.6 amp flush type 3** pin **socket** and 1 No. 6 amps switch cover plate, 5 sided G.I. Boxes for housing switches and sockets and earthing complete as required (for Raw/ UPS). GI Box to have earth pin for body earthing	Nos.	**120**		
12	Providing and fixing of **3 Nos.6 amp** flush type 3 pin **socket** and 1 No. 16 amps switch cover plate, 5 sided G.I. / PVC moulded Boxes for housing switches and sockets and earthing complete as required (for UPS/RAW). GI Box to have earth pin for body earthing	Nos.	**65**		
13	Providing and fixing of **1 No.16 amps** flush type 6 pin socket and 1 No. 16 amps switch with indicator, cover plate, 5 sided G.I. Boxes for housing switches and sockets and earthing complete as required (for UPS & Raw) GI Boxes to have earth pin for body earthing	Nos.	**5**		

14	Supply and fixing of the following sizes of thermoplastic moulded plug and socket IEC 309 type in PVC Box of suitable size flush / surface and making connections complete as required. The box shall be IP 44.				
a	3 pin 32 A 1 phase industrial socket plug top	Nos.	**2**		
15	Providing and fixing in position the following MS conduits including all accessories concealed in F. ceiling/wall/floor as required including 1.6 mm thick MS junction or pull boxes with 3mm thick perspex sheet cover plate compl-te with 1.6 mm dia. G.I. pull wires in the length of conduit.				
a.	20 mm dia conduit (1.6 mm thick)	RM	**75**		
b.	25 mm dia conduit (1.6 mm thick)	RM	**100**		
c.	32 mm dia conduit (2.0 mm thick)	RM	**50**		
16	The Contractor shall provide sufficient temporary lighting for working in the Building total area 4200 sq. ft. divided in 1 Floors and maintain the same till completion of the project.It shall include replacement of all fused/faulty lamps.It shall include providing 4 Sets of Portable power distribution boards with 4 nos 16/32 A single phase plug sockets and 1 nos 32 Amps 3 phase plug socket (industrial type with ON/OFF MCB) Provide suitable size of MCB distribution board with 100 mA RCCB.The Contractors will tap off supply from these plugs for his use. Hologen in the open area and Tubelights provision in the closed room to maintain a lighting level of 150 lux on the floor,.Each 15 A socket and each Light circuit shall be protected by suitable MCBs.Use three core PVC Insulated PVC sheathed copper conductor cables for wiring.The contractor shall salvage the complete wiring and take it back at the end of the project. All the entry/ toilets/staircases, vendor store area, material stacking place to be provided with adequate lighting with 4feet Patti fitting on the equal distance	L.S.	**1**		
	TOTAL CARRIED OVER TO SUMMARY				**-**

G	**CONDUITING FOR DATA & CONDUITING AND WIRING FOR T.V. SYSTEM.**				
1	Providing and fixing in position the following **MS conduits** including all accessories concealed in F. ceiling/wall/floor as required including 1.6 mm thick MS junction or pull boxes with 3mm thick perspex sheet cover plate compl-te with 1.6 mm dia. G.I. pull wires in the length of conduit.				
b.	25 mm dia conduit (1.6 mm wall thickness)	RM	**150**		
c.	32 mm dia conduit (1.6 mm wall thickness)	RM	**100**		
2	Providing and fixing in position suitable 1.2 mm thick G.I./ PVC outlet box for RJ- 45 computer outlet with all fixing accessories as required.	Nos.	**65**		
3	Supply and fixing of 1.2 mm thick G.I Box along with RG 11 TV Co axial socket with Cover Plate	Nos.	**1**		
4	Supply drawing connecting testing and commissioning of TV Coaxial cable RG 6 in existing conduit	RM	**100**		
	TOTAL CARRIED OVER TO SUMMARY				

Sl No..	Image	Description	Unit	Qty.	Supply Rate In Rs.	Installation Rate In Rs.	Supply Amount In Rs.	Installation Amount In Rs.
H.	**SUPPLY , FIXING , TESTING , COMMISIONING OF LIGHTING FIXTURES**							
	Make Divinity /Wipro/Philips							
	The colour temperature of the lamps shall be 5700 deg K.							
1		Recessed ceiling luminaire LED(Light Emitting Diode) system wattage 35W, 5700K,,Luminous Flux of luminaire is 2929.5lm, CRI >80, 230V, direct light emission, sheet metal housing, Powder Coated white, opal diffuser in synthetic material,fixation with of support, halogen-free internal wiring, integral HFelectronic control gear Protection class I, IP40,L = 595 mm B = 595mm, H = 35mm .	Nos	**40**				
2		Recessed Luminaire LED (Light Emitting Diode) system wattage-28W/4'feet, Luminous Flux of luminaire is 1630lm, 5700K, CRI >80, 230V, Direct Emission, aluminium, Profile in high quality powder coated, Halogen free internal wiring, PMMA Diffuser for Homogenous Light distribution. Protection Class I, IP 40,Dimension-L-**1200mm, width-55.6mm,height**-70mm. Model : Divinity Viraj 45 direct recessed /Equivalent approved	Nos	**40**				

3		Pendent Luminaire Channel LED (Light Emitting Diode) wattage-25W/4'feet, Luminous Flux of luminaire is 1630lm, 5700K, CRI >80, 230V, Direct Emission, aluminium, Profile in high quality powder coated, Halogen free internal wiring, PMMA Diffuser for Homogenous Light distribution. Protection Class I, IP 40,Dimension-L-**1200mm, width-55.6mm,height**-70mm. Model : DIVINITY Viraj 45 Pendant	Nos	**6**				
4		Divinity Lights Recessed AMIGO ROUND Down light LED with LED (Light Emitting Diode) system power: 12W, luminous flux of luminaire 902lm, 5700 K , Neutral White, CRI >80, 230V, direct light emission, housing in Aluminium white, wide beam, with ceiling trim white, ON/OFF,Control Gear : NON-Dimmable , Protection class I, IP40 Outer DAø = 154mm , Cutout dia =144 mm, H=55mm	Nos	**15**				

4		LED cove light fixture with average lumen output of 630 lm per metre for white color including all drivers, connecting cables, controllers, led mounted in extruded poly corbonate, suitable to end to end coupling, non dimmable, average 5 watt / metre for mono color and 11 watt/ metre for white color. Color as per Architect instruction complete as required equivalent to philips cat no: vaya cove	Rmt	**155**				
5		Divinity Downlighter Rio Specular Recessed Downlighter 7 W LED Spot light.Ingress Protection : 40 Optics : Lens & Reflector CCT : 3000K/4000K/5700K Colour Rendering Index : Ra > 80 Control Gear : NON-Dimmable UGR : <19 Rated Life Hours : L70 (50, 000Hrs) Beam angle :15°/24°/38°/45°/60° Material : Die-cast Aluminium Mounting : Recessed Finish : Powder Coated Dimension :Outer Dia = 74mm, Cutout Dia = 5mm,	Nos	**6**				
		12W Recessed Down lighter , with lens reflector , adjustable . Divinity model Eye ball	Nos	**10**				

6		SITC of 3 Watts LED Ni Cd Battery backup up to min 90 minutes, **emergency Exit light of Prolite Make** or equivalent. The sample shall be submitted before ordering.	Nos	**3**				
7		Havells Airboll high speed 450 mm wall fan (white) complete in all respect .	Nos	**12**				
8		Exhaust fan 300 mm sweep with 1400 rpm speed inclusive of gravity louver shutters.	Nos.	**1**				
9		Hanging decorative led down lighter with base price 15000/- (Bank reserve the right to select any model /series of base price mentioned)	Nos	**1**				
		TOTAL						
		TOTAL CARRIED OVER TO SUMMARY						

Sl No..	Description	Unit	Qty.	Supply & Installtion Rate	
				Rate In Rs.	Amount In Rs.
J	**ADDRESSABLE FIRE ALARM SYSTEM AND PA SYSTEM**				
A	**FIRE DETECTION SYSTEM (ANALOGUE ADDRESSABLE)**				
1	Supply, installation, connecting, testing and commissioning of addressable photoelectric type Smoke Detectors with mounting base, blinking LED etc. complete as required.	Nos	30		
2	Supply, installation, connecting, testing and commissioning of addressable rate of rise cum fixed temperature Heat Detectors with mounting base, blinking LED etc. complete as required.	Nos	1		
3	Supply & laying of following grade with copper conductor armoured copper conductor cable as per specifications in cable trays, clamped including anchor fastners to wall with suitable clamps, saddles fixing bolts, 2 Metal cable glands for each detector back box, complete in all respect as required as per specifications				
a.	2 core x 1.5 sq. mm	RM	80		
4	Supply, installation, connecting, testing and commissioning of Response indicator	Nos	10		
5	Shifting of existing nosel to false ceiling complete in all respect inclucinf all fittings and required accessories to make it functional	Nos.	50		
	TOTAL				

B	**PUBLIC ADDRESS SYSTEM**				
1.0	Providing and fixing in position the following FRLS PVC conduits including all accessories concealed in False ceili-ng/walls/partitions as required incl-uding 5 sided 1.5mm thick FRLS PVC junct-ion boxes and 3mm thick perspex sheet cover plate comp-lete with G.I. pull wires.				
a.	1.6mmwall thickness 20mm dia	RM	180		
b.	1.6mm wall thickness 25 mm dia	RM	20		
2.0	Providing and fixing in position the following G.I. flexible conduits including all accessories				
a.	1.6mmwall thickness 20mm dia	RM	20		
3.0	Supply,installation, testing and commissioning of following Philips (BOSCH) make Music Accessories / Equipments.				
a.	Supply, installation, testing and commissioning of complete loud speaker ceiling mounted type , Complete as required (Simliar to Bosch LBD 0606) with metal grill.	Nos.	18		
b	Supply, installation, testing & commissioning of Bosch Mixer Amplifier capable of delivering 240 W RMS power output, built-in fan for temperature control,built in line matching transformer distortion typically 0.03% @ 1 KHz, Hum and Noise 90 dB below rated output, Complete as required	Nos.	1		
c	Philips Microphone unit	Nos.	1		
d	Supply, installation, testing & commissioning of suitable size of equipment rack for above system made out of CRCA sheet to house all the control equipment. Complete as required.	Nos.	1		
e	Main Termination Box	Nos.	1		
4.0	Wiring with 2 core 24/.2 mm PVC insulated twisted copper conductor wires in existing conduit/ trunking as required.	RM	260		
	TOTAL				
	TOTAL CARRIED OVER TO SUMMARY				

Nodes Summary						
Total DATA Nodes				**130**		
Total Voice Nodes				**60**		
Total Nodes (DATA+Voice)				**190**		
Average Length/Ports in Mtrs				35		
BOQ for Supply of Passive Copper Cabling						
A: Horizontal Cabling (For Data)						
Sl.No.	**Make**	**ITEM DESCRIPTION**	**UOM**	**Total Qtys**	**Unit Rate**	**Amount**
		Supply & Installtion of Followings items including penta scanning				
A.1		GS8E CAT6 Modular Patch Cords,7Ft , **BLUE**- for Data - User end	Each	**130**		
A.2		CAT 6 MGS400 I/O for Data Points (for user end) **blue** Colour	Each	**130**		
A.3		2 Port Face Plate Shuttered (85*85mm),white color	Each	**5**		
A.4		4 Port Face Plate Shuttered (85*85mm),white color	Each	**60**		
A.5		GigaSPEED® XL 3071 ETL Verified Category 6 U/UTP Cable, low smoke zero halogen white jacket,4 pair count,1000ft (305m) length,WE TOTE® box for DATA	Box/305mtr	**15**		
A.6		M2000 U/UTP Modular Panel 1U, 24 port angled Data	Each	**6**		
A.7		CAT 6 MGS400 I/O for Data Points (for rack end) **BLUE** Colour	Each	**144**		
A.8		GS8E CAT6 Modular Patch Cords,7Ft , **BLUE**- for Data - Rack end	Each	**130**		
B: Horizontal Cabling (For Voice)						
B.1		CAT 6 MGS400 I/O for Voice Points (for user end) Yellow Colour	Each	**60**		
B.2		GigaSPEED® XL 3071 ETL Verified Category 6 U/UTP Cable, low smoke zero halogen white jacket,4 pair count,1000ft (305m) length,WE TOTE® box for VOICE	Box/305mtr	**7**		
B.3		M2000 U/UTP Modular Panel 1U, 24 port angled voice	Each	**3**		
B.4		CAT 6 MGS400 I/O for Voice Points (for rack end) **Yellow** Colour	Each	**72**		
B.5		GS8E CAT6 Modular Patch Cords,7Ft , **Yellow** - for Voice -Rack end	Each	**60**		
C: Voice Resources						
C.1		25 Pair Indoor riser cable	Mtr	**25**		
C.2		M2000 U/UTP Modular Panel 1U, 24 port angled for voice resources	Each	**3**		
C.3		CAT 6 MGS400 I/O for Voice Points (for rack end) **Yellow** Colour voice resources	Each	**72**		
C.4		50 Pair Krone MDF (Field Riser cable)	Each	**1**		
C.5		10 Pair Disconnection Module	Each	**5**		
C.6		Jumper Wire ,100Mtr Roll	Roll	**2**		
D: Network Rack & Accessories						
F.1		Tapped/2Post/45U/Powder Coated/19"DIN/Black including cable manager	Each	**1**		
F.2		Run-Way Kit-20Inch	Each	**1**		
F.3		Mounting Hardware/OR/Pk-20	Each	**2**		
F.4		1Ph, 230V, 16A, 2U standard rack mount power distribution unit with 6 X Indian Round Pin 5/15A, Inlet Plug type 16A Indian Round Pin with 3 meter input cable	Each	**2**		
Grand Total for Supply & Installation						

AIRCONDITIONING SYSTEM - OVERALL SUMMARY

ITEM	DESCRIPTION			AMOUNT
1.0	SECTION 'A' - REFURUBISHMENT WORKS			
2.0	SECTION 'B' - LOW SIDE HVAC WORKS			
3.0	SECTION 'C' - SPLIT UNITS FOR TECHNICAL AREAS			
	T O T A L	Rs.		**0.00**

SECTION 'A' - REFURUBISHMENT WORKS

ITEM	DESCRIPTION			AMOUNT
1.0	EQUIPMENT			
	T O T A L -SECTION 'A'	Rs.		

SECTION "B" :CHW BASED CS AHUs FOR OFFICE AREA - LOW SIDE

ITEM	DESCRIPTION			AMOUNT
1.0	PIPING & VALVES			
2.0	DUCT WORK/ AIR TERMINALS			
3.0	INSULATION			
	T O T A L -SECTION 'B'	Rs.		

SECTION 'C' - SPLIT UNITS FOR TECHNICAL AREAS

ITEM	DESCRIPTION			AMOUNT
1.0	EQUIPMENT			
	T O T A L-SECTION 'C'	Rs.		

Notes: GST on above estimated cost shall be extra as actual.

BILL OF QUANTITIES HVAC WORK

SECTION 'A' - REFURUBISHMENT WORKS

S.NO	ITEM DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
1.0	**EQUIPMENT**				
1.1	**DISMANTELING OF EXISTING AHUs**				
	Dismanteling of existing AHUs complete with valve station, CHW Piping, starter panel, cable & associated work. AHUs, piping & other accessories to be handed over and shifted to location allocated by Clients/PMCs in same premises. **Contractor to visit site before furnishing quote.**				
a.	Existing AHU -5500Cfm Type - Ceiling Suspended	No	1		
1.2	**RE-INSTALLATION OF EXISTING AHUs**				
	Reinstallation of existing AHUs, associated Valve station , complete in all respect to make it worakable . Vendor to visit at site for AHUs overhauling before furnish their quotes.				
a.	Existing AHU -5500Cfm Type - Ceiling Suspended	No	1		
1.3	**DISMANTELING OF EXISTING AHUs**				
	Dismanteling of existing AHUs complete with valve station, CHW Piping, starter panel, cable & associated work. AHUs, piping & other accessories to be handed over and shifted to location allocated by Clients/PMCs in same premises. **Contractor to visit site before furnishing quote.**				
a.	Existing AHU -1400Cfm-3500Cfm Type - Ceiling Suspended	No	2		
1.4	**RE-INSTALLATION OF EXISTING AHUs**				
	Reinstallation of existing AHUs, associated Valve station, complete in all respect to make it worakable. Vendor to visit at site for AHUs overhauling before furnish their quotes.				
a.	Existing AHU -1400Cfm-3500Cfm Type - Ceiling Suspended	No	2		
	TOTAL ITEM NO. 1 (EQUIPMENT)			**Rs.**	

SECTION 'B' - LOW SIDE HVAC WORKS					
1	**PIPING AND VALVES**				
1.1	**CHILLED WATER PIPING**				
	Supply, Installation, Testing and Commissioning of MS heavy class (Class "C') pipes cut to required lengths and installed with all welded joints.Quoted price shall be inclusive of supply and fixing in position the necessary fittings like elbows, tees reducers, sockets etc., and hanging arrangement and floor supports as required, rigid PUF saddles, washers and check nuts etc in accordance with the approved shop drawings and specifications. All sleeves in Fire wall/slab shall be sealed using fireproof sealant. Pipes shall be of following sizes :				
	For Pipe sizes of 80mm dia & above complete "C" channel support shall be provided. For floor supports, supports shall be complete with pipes of adequate size with base plate & vibration isolation pads and "C" channel. All pipe supports channels, fastner etc. to be selected as per support depth & loading as per structural consultant recommendations.				
a	50mm dia	RM	35		
b	40mm dia	RM	4		
c	25mm dia	RM	4		
1.2	**CONDENSATE DRAIN PIPING -GI**				
	Supply, Installation , Testing and Commissioning of GI medium class (Class 'B') pipes cut to requird lengths and installed with all screwed joints for condensate drain. Quoted price shall be inclusive of supply and fixing in position the necessary fittings like elbows, tees reducers etc., and supporting arrangement in accordance with the approved shop drawings and specifications.Pipes shall be insulated with 9mm thick closed cell elastomeric insulation with class 'O' fire retardant properties in tubing form . Pipes shall be of following sizes :				
a.	50mm dia	RM	10		
b.	40mm dia	RM	20		
b.	32mm dia	RM	10		
c.	25mm dia	RM	5		
1.3	**CONDENSATE DRAIN PIPING -cPVC**				
	Supply, Installation, Testing and Commissioning of cPVC pipes cut to required lengths and installed for condensate drain. Quoted price shall be inclusive of supply and fixing in position the necessary fittings like elbows, tees reducers etc., and supporting arrangement in accordance with the approved shop drawings and specifications. Pipes shall be insulated with 9mm thick closed cell elastomeric insulation with class 'O' fire retardant properties in tubing form . Pipes shall be of following sizes :				
b.	40mm dia	RM	2		
c.	25mm dia	RM	2		
	TOTAL ITEM NO. 1 (PIPING & VALVES)			**Rs.**	

2	**DUCTWORK/AIR TERMINALS**				
2.1	**FACTORY FABRICATED DUCTING**				
	Supply , Installation and Testing of factory fabricated GSS ducting complete with vanes, splitter dampers, fire retardant gaskets hanging arrangement including fully threaded GI rods and GI "C" channels/ rolled steel wires or Gripple Wire Rope Hangers & Supports complete with end fixing, GI "C" channels etc. as approved by clients/consultants in accordance with the approved shop drawings and specifications. Quoted price shall be inclusive of necessary scaffolding charges towards installation of supply/exhaust air ducts outside or within building wherever required. Quoted price should also include necessary charges towards duct supporets including MS angle/channel arrangement as required for ducts being installed outside or within building wherever required.				
	Spacing between duct supports should not exceed 2m in both cases i.e GI rods with GI "C" channels & Gripple Wire Rope Hanger support . In case of Gripple Wire Rope Hanger support for duct sizes above 1800mm, MS angles duly painted with black enamel paint should be used along with neoprene pad in between the duct & MS angle. All duct support to be provided with check nuts (lock nuts).				
	While selecting the duct supports vendor shall ensure vibration free installation.Quoted price shall be inclusive of smoke test using smoke bombs.				
a.	1mm to 899mm -- 26G GSS with TDC Joints	SqM	220		
b.	900mm to 1200mm -- 24G GSS with TDC Joints	SqM	30		
c.	1201mm to 1800mm - 22G GSS with TDC Joints	SqM	15		
d.	1801mm to 2100mm - 20G GSS with TDC Joints	SqM	5		
2.2	**SITE FABRICATED DUCTING**				
	Supply, Fabrication, Installation and Testing of sheet metal ducts complete with vanes, splitter dampers, hanging arrangement including check nuts in accordance with the approved shop drawings and specifications.				
	a. 0.63mm (24 gauge) GSS	SqM	10		
	b. 0.8 mm (22 gauge) GSS	SqM	5		
2.3	**FLAT OVAL SPIRAL DUCT**				
	Supply, Installation and Testing of factory fabricated & factory internally insulated GSS flat oval spiral ducting complete with vanes,splitter dampers, fire retardant gaskets hanging arrangement including fully threaded GI rods , GI straps and GI "C" channels/ rolled steel wires or Gripple Wire Rope Hangers & Supports complete with end fixing, GI "C" channels etc. as approved clients/consultants in accordance with the approved shop drawings and specifications.Quoted price shall be inclusive of necessary scaffolding charges towards installation of supply/exhaust air ducts outside or within building wherever required.				
	Duct Insulation shall be as follows :				
	20mm thick open cell nitrile rubber insulation of density within 140-180 Kg/m3 with perforated aluminium foil.				
	Ducts shall be factory powder coated of colour and				
	shade as approved by the Architects for exposed spiral				
	ducts. Quoted price shall be inclusive of powder coating.				

	Necessary compliance to be submitted by vendors.				
	Without Powder Coated-With 9mm thick insulation				
a.	1mm to 1700mm -- 20G GSS	SqM	10		
2.4	**DUCO PAINT (For Exposed Duct)**				
	Supply and Application of minimum two coats of Duco of colour and shade as approved by the Architects for exposed ducts. Quoted price shall be inclusive of primer before paint and all neceesary arrangement as required for providing the paint over duct.	SqM	10		
2.5	**FLEXIBLE CANVASS CONNECTIONS**				
	Supply, Installation, Testing of 125mm deep antivibration flexible joints at the outlet of air handling units/ductable split units//inline fans. Flexible connections shall be constructed using imported fire retardant fabric with extruded aluminium frame/flange on both sides of approved make.	RM	15		
2.6	**LINEAR GRILLES**				
	Supply, Installation , Testing and Balancing of one way blow linear supply cum return air grilles complete with fixed core as per approved shop drawings and specifications. The grilles shall be of approved colour & shade.				
	Powder coated aluminium grilles of extruded sections with integral flanges on both sides & ends as required complete with corner pieces.				
	i. 100/150/200/250 mm High grilles	SqM	8.5		
2.7	**DOUBLE LOUVERED GRILLES**				
	Supply, Installation ,Testing and Balancing of double				
	louvered supply air grilles as per approved shop drawings				
	and specifications complete with key operated aluminium				
	volume control dampers.				
	a. Powder coated extruded aluminium grilles.	SqM	0.6		
2.8	**AIR TRANSFER GRILLES**				
	Supply, Installation and Testing of of extruded aluminium powder coated air transfer grilles to be provided at the door of toilets/pantry.	SqM	0.2		
2.9	**SUPPLY AIR DIFFUSERS**				
	Supply, Installation, Testing and Balancing of square supply air diffusers with removable key operated volume control dampers with opposed blades & 150mm high GSS plenum as per the approved shop drawings and specifications.The diffusers shall be anti-smudge ring type/flat type as approved by the interior designer. Diffusers shall be with removable core for the following neck sizes. The diffusers shall be suitable for fixing in the gypsum/grid ceiling. The diffusers shall be of regular type and with outer dimension of 600 x 600mm.				
	600x600 Powder coated extruded aluminium diffusers of approved colour & shade suitable for fixing in grid ceiling.	No	28		
2.10	**RETURN AIR DIFFUSERS**				

	Supply, Installation,Testing and Balancing of square return air diffusers same as supply air diffusers but without volume control dampers as per the approved shop drawings and specifications. The diffusers shall be anti -smudge ring /flat type.				
	600x600 Powder coated extruded aluminium diffusers of approved colour & shade suitable for fixing in grid ceiling.	No	24		
2.11	Supply, Installation, Testing and Balancing of linear slot diffusers with Hit & Miss type extruded aluminium volume control dampers at supply air outlets as per the approved shop drawings and specifications.				
a.	3 slot/2slot, powder coated extruded aluminium diffusers of approved colour & shade for supply air with Hit & Miss type dampers	SqM	0.5		
b.	3 slot/2slot, powder coated extruded aluminium diffusers of approved colour & shade for return air without Hit & Miss type dampers	SqM	0.5		
2.12	Supply, Installation,Testing and Balancing of flexible ducting comprising of inner as well as outer skin constructed out of aluminium & fibre glass insulation 25mm thick of minimum 24 kg/cu.m density insulation sandwitched in between. Duct should confirm to fire rating standards BS-476 part 5, 6 & 7. Flexible Ducts of following sizes as per approved shop drawings, specifications :				
a	250 mm dia	RM	2		
b	200 mm dia	RM	15		
c	150 mm dia	RM	10		
2.13	Supply, Installation and Testing of single piece GI round spigot made out of spinning process with 50mm height and having grooves on both sides and circular flanges. Spigots shall be installed on main ducts to facilitate connection of flexible ducts.				
a	250 mm dia	RM	4		
b	200 mm dia	RM	30		
c	150 mm dia	RM	20		
2.14	Supply, Installation and Testing of Butterfly damper				
	of aluminium sheet construction with two flap with				
	sleeve as per thespecifications and shop drawings.				
a	150 mm dia	No	2		
b	200 mm dia	No	5		
c	250 mm dia	No	4		
2.15	Supply, Installation and Testing of GI box type				
	volume control dampers as per the specifications				
	and shop drawings.- **For Rectangular Duct**	SqM	2.5		
2.16	Supply, Installation and Testing of GI multi blade				
	type louver dampers as per the specifications				
	and shop drawings.	SqM	4		
2.17	Supply, Installation and Testing of extruded aluminium				
	powder coated louver with GI wire mesh to be installed				
	outside for discharge of exhaust air from exhaust fans				
	as per the specifications and shop drawings.				
	Sample of louvers to be got approved from consultants				
	and Clients prior to procurement.	SqM	0.5		
2.18	Supply, Installation and Testing of Bird Screens with GI				
	wire mesh to be installed at the suction of fresh air/discharge				

	of Exhaust air as per the specifications and shop drawings.				
	Sample of bird screen to be got approved from consultants				
	and Clients prior to procurement.	SqM	0.5		
2.19	Supply, Installation and Testing of non return dampers.				
	NRDs to be installed in the ducts as per				
	the specifications and shop drawings.				
	Sample of NRDs to be got approved from consultants				
	and Clients prior to procurement.	SqM	0.5		
	TOTAL ITEM NO.2 (Ducting & Air Terminals)			**Rs.**	
3	**INSULATION**				
3.1	**ACOUSTIC LINING OF DUCTS**				
3.1.1	**Using Open Cell Nitirile Rubber**				
	Supply and Application of internal acoustic lining of supply air ducting using open cell nitrile rubber insulation with density within 140-180 Kg/m3 as per the approved shop drawings and specifications. Insulation material shall be bonded with the ducts using metal screw and washers to facilitate grip to the GI sheet.				
a.	10mm thick lining	SqM	35		
3.1.2	**Using Fibre Glass**				
	Supply and Application of internal acoustic lining of supply/ return air ducting using resin bonded fibre glass insulation of density not less than 32Kg/CuM as per the approved shop drawings and specifications. Quoted price shall be inclusive of GSS channel, metal screws, washers, fibre glass tissue, perforated aluminium sheet of 24G etc. as required for complete installation.				
a.	25mm thick lining	SqM	25		
3.2	**THERMAL INSULATION OF DUCTS**				
	(Using Class 'O' Closed Cell Elastomeric insulation)				
	Supply and Application of external thermal insulation of supply /return air ducting using closed cell elastomeric nitrile rubber insulation with class 'O' fire retardant properties as per the specifications and drawings. Adhesive - AC Duct King Eco Fresh				
a.	9mm thick insulation - For S/A Duct in contact with R/A	SqM	225		
3.3	**CHW PIPE INSULATION**				
3.3.1	**Using Closed Cell Elastomeric Insulation**				
	Supply and Application of 25mm/32mm thick closed				
	cell elastomeric insulation in tubing form				
	for chilled water piping as per the				
	specifications. Quoted price shall be inclusive				
	of adhesive as per specifications. Joints shall				
	be sealed with adhesive forming proper				
	bonding. Quoted price shall be inclusive of				
	24 G aluminium cladding for chilled water piping.				
a	50mm dia (25mm thick)	RM	35		
b	40mm dia (25mm thick)	RM	4		
c	25mm dia (25mm thick)	RM	4		
	TOTAL ITEM NO. 3 (INSULATION)			**Rs.**	

SECTION 'C' - SPLIT UNITS FOR TECHNICAL AREAS

1.0	**EQUIPMENT**				
1.1	**SPLIT UNITS**				
	Supply , Installation , Testing and Commissioning				
	of split units, each comprising of an outdoor and				
	a single indoor unit as shown on the drawings				
	and as per the specifications. Enclosures shall				
	be factory fabricated and painted to a				
	smooth finish . Oudoor unit shall consist of hermatically				
	sealed/ semi- hermatic scroll/rotary compressor/s,				
	air cooled condenser with fan. Indoor unit shall consist of				
	fan section with dynamically balanced				
	centrifugal fan/s driven by FHP/TEFC				
	squirrel cage induction motor, multirows deep				
	DX- copper cooling coil with aluminium fins,				
	thermostatic expansion valve, synthetic fibre				
	filters, insulated drain pan, safety controls,				
	safety controls, thermostat all complete in a				
	unit. The quoted price shall be inclusive of				
	full charge of refrigerant gas, vibration				
	isolation arrangement.				
	Refrigerant Shall be R-32/R410A/R407C.				
A.	**Single phase Non-ductable split units with**				
	Rotary compressor (5 Star Rating) INVERTER AC :				
	(Units should be suitable to handle piping length upto				
	15-16 RM with Level Difference of around 7-8RM.)				
	Make (Carrier, Daikin and Mitsubhishi)				
	2TR nominal capacity, split unit with single				
	high wall non-ductable indoor unit with rotary				
	compressor with corded remote controller & associated cable.	No	3		
1.2	**REFRIGERANT PIPING**				
	Supply, Installation,Testing & Commissioning of copper refrigerant piping complete with copper fittings & charge of refrigerant gas for the above split units. Piping associated with split units to be insulated with 13mm thick closed cell elastomeric insulation with class 'O' fire retardant properties in tubing form as required. Piping shall be laid over duly painted slotted angle trays fixed with GI clamps. Quoted Price shall be inclusive of UV protection paint for all exposed pipes of approved make. Price shall be inclusive of copper power cabling from indoor to outdoor unit as required. Referigerant piping shall be epoxy coated to prevent erosion.				
	Price shall be inclusive of copper power & control cabling from indoor to outdoor unit as required				
b.	Pair of Soft refrigerant piping for split packages with rotary compressor.	RM	50		
1.3	Supply, Installation , Testing and				
	Commissioning of PLC for Auto Sequencing				
	of Split units with micrprocessor based				
	controller along with enclosure/accessories				
	having facility for configuration of the same				
	as per requirement for sequenced Start/Stop				
	for following split units :				

a.	Two number Split unit with one Standby	Sets	1		
1.4	**MS FRAME FOR ODUs**				
	Supply and Erection of MS base frame duly				
	applied with red-oxide primer & followed by				
	black enamel paint for mounting of outdoor units.	Kg	45		
	TOTAL ITEM NO. 1 (EQUIPMENT)			**Rs.**	

	SUMMARY OF ALL HEADS		
S.NO.	ITEM	UNIT	AMOUNT
1	INTERIOR FINISHING WORK	RS.	
2	ELECTRICAL INSTALLATION WORK	RS.	
3	AIR CONDITIONING DUCTING WORK	RS.	
	SUB TOTAL	RS.	
	DISCOUNT IF ANY		
	GRAND TOTAL		
	GST EXTRA AS APPLICABLE EXTRA		