

INTERIOR FURNISHING BILL OF QUANTITIES					
ITEM NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<b>1</b>	<b>VINYL FLOORING</b>				
	Providing and laying PVC vinyl flooring of Marvel, LG, Marco polo/ equivalent of approved shade in vinyl planks of size 6" x 36" & 2mm thick, complete in all respect as per manufacturer specifications .	20.00	SQ.MT		
<b>2</b>	<b>PARTITION</b>				
	The rate shall include the frame work above false ceiling level that is upto RCC roof slab. 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.				
<b>2.1</b>	<b>Full Height Glazed Partition in 12 mm thk. Toughen glass.</b>				

	<p>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 &amp; T and L for glass joints along with required gasket of 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.2.2 (Glass Make- Saint Gobain/Modiguard/Asahi)</p>	14.40	SQ.MT		
<b>2.2</b>	<b>FULL HEIGHT SOLID LAMINATED PARTITION</b>				
	<p>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</p>	56.00	SQ.MT		
	<p>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.</p>				

	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)				
<b>2.3</b>	<b>Low Height laminated Partition</b>				
	Providing & fixing Low Height laminated Partition 1350/1500 mm high with same specifications for framing as item no. 2.2 , but with 12mm toughened glass above 900 mm , fixed as per design/ details. Item to include 3" x 1" steam beech wood moulding on top complete with melamine / PU polished finish including base preparation as per manufacturer specifications. complete to the satisfaction of the Architect / Bank's Engineer. Rates to include, fixing of soft board panel appx. 4'x18" with fabric mounted above wherever required, making provision for electrical conduits, switches and junction boxes.	10.50	SQ.MT		
<b>2.4</b>	<b>Cash Cabin front glass</b>				
	P/F 12 mm thk. Toughened glass with pencil polish edge in two pices or as / design fixed with D - bracket, with 8" x 8" cemi cylindrical opening.	1.16	SQ.MT		
<b>2.5</b>	<b>Cash Cabin Partition 1850 height</b>				
	P/F partition with frame work and specification same as item no.2.2 . The item include P/F 12 mm thick (impact resistant glass) toughen glass with pencil polish edges all around from 3'-0" height till top fixed with aluminium glass profile . The side partition will have an opening of 200 mm x 100 mm in partition at 800 mm vl. Rates to include all fittings fixtures hardware, complete in all respect.	5.20	Sq.mt.		

	Door in partition shall be measured as partition, Cash cabin door 1600 mm Height x 750 mm width x 30mm thick laminated both sides. It shall have sturdy hinges and an aluminum handle duly powder coated. Each door must be provided with a spring-loaded night latch of the outward opening type. The door frame will have a cross member at a height of 1800mm.				
	<b>2.6 FULLY GLAZED DOOR</b>				
	P/F TOUGEN GLASS DOORS: Installation of fully glazed frameless glazed door (Single or double leaf of size as mentioned in drawing and as directed by the Architect) made out of 12 mm thk. Toughened glass and the door shall be fixed with Dorma ,Hafele , Enox or approved make floor springs with SS finish patch fittings on top, bottom. Lock shall be of Dorma , Hafele, Enox or approved make. The door shall have lock in the center of approved make with 450 mm to 600 mm long SS handle of 25 mm dia. (for internal doors) and 900 mm long SS handles of 25 mm dia. (for main entry doors) to be fitted horizontally/ vertically as per instructions of the Architect. 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. complete in all respects. 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.				
2.6.1	Single leaf door opening size (900 mm x 2400mm)	2.00	No.		
2.6.2	Double leaf door opening size (1800 mm x 2400mm)	1.00	No.		
	<b>2.7 FLUSH DOOR</b>				

	<p>Providing &amp; 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</p>				
	Door size ( 800 x 2100 mm )	1.00	NO		
	<b>3 PANELING</b>				
	<b>3.1 LAMINATED Paneling</b>				
	<p>Providing &amp; fixing LAMINATED Paneling with frame work of 45 x 25 mm GI sections (India Gypsum) @ 600 mm c/c in both directions, finished with 12 mm thick commercial grade ply and then finished with 1.0 mm thick laminate in two or more colour. Paneling to have steam beach wood moulding on top edge , complete with High gloss PU paint of approved colour, . Panelling to have provision of extra frame work as necessary for skirting and making cutouts for electrical switch plates, switch boxes, light fittings light etc. making provision for laying conduits as per drawings &amp; directions etc. complete to the satisfaction of the Architect /Bank's Engineer. (Base price of laminate to be used to be Rs. 50/ sq.ft.).</p>	55.00	SQ.MT		
	<b>3.2 LACQUER GLASS</b>				

	Providing & fixing Lacquer Glass paneling with frame work and base frame as specified on (item no. 3.1). finished with 8 mm thk. Commercial grade ply and then finish with 6.0 mm thick extra clear lacquer single colour, as per drawings & directions. complete to the satisfaction of the Architect /Bank's Engineer. Rates to include extra ply Backing required for levelling of glass and laminated panelling where ever required. (Base Price of lacquered glass to be used to be Rs. 300/sq.ft. .	5.30	SQ.MT		
<b>3.3</b>	<b>EXTERNAL ACP CLADDING WORK</b>				
	Location: Along the Front façade walls/ columns / covering rolling shutter and sides as directed by the Architect or as per site conditions.				
	Material: 4.00 mm thick. External grade Aluminum composite paneling of approved make.				
	Shade: Equivalent make – Pure white -10 (100) or Silver metallic 500.				
	Providing and fixing of 4.00 mm thick. external grade Aluminium composite panelling of Alubond /Alcobond or equivalent make with framing of aluminium tube section of min. 37.5mmx50mm and 20 gauge at a spacing of 600mm center to center both ways(vertical and horizontal) ACP to be of approved shade in 600mm wide panels or distributed equally. ACP sheets to be fixed to the frame with 3M make adhesive along with mirror screws. Joints to be finished with silicon based sealant. <b>ACP sheets (Alubond/ Eurobond/ Fujibond/ Alcobond) to be min. 4mm</b> thick with aluminum foil thickness to be min. 0.25mm on both sides. Fixing into a neat finish in aesthetic point of view, without any undulations in facia all complete as per Drawing and instruction of Architect In-charge Item includes silicon sealant (Dow Corning 789) masking tape scaffolding,lead,lift,wastage , as may be required etc. complete as per site conditions.	7.50	SQ.MT		
<b>3.4</b>	<b>WALL PAPER</b>				

	<p>Providing and fixing approved high quality decorative, completely strippable, non- woven, environment friendly wall paper/wall covering of minimum weight 250 gsm 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. (Quoted (without GST) Base Price of wall paper to be used to be Rs. 80/sq.ft.). Rate to include the base preparation on wall with putty and 3 coats of enamel paint.</p>	28.00	SQ.MT		
<b>4</b>	<b>False Ceiling</b>				
	<p>Item includes providing False Ceiling in plane, curve shape and design. Suspending system and frame work shall match layout of A.C. units , electrical / fire protection wiring / fixtures, etc. Rate to include provision of extra frame work, necessary scaffolding needed due to layout of other utilities referred above and fixtures etc. (Measurement shall be taken of the plan area only nothing extra for cove design and verticle sections)</p>				
<b>4.1</b>	<b>Gypsum Board False Ceiling</b>				
	<p>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</p>	95.00	SQ.MT		

	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				
<b>4.2</b>	<b>Mineral Fibre Acoustic Ceiling</b>				
	Providing and fixing False Ceiling with Mineral Fibre 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 Premier of size 600 x 600 x 16 mm (thk.) 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/ Bank's Engineer.	84.00	SQ.MT		
<b>5</b>	<b>P.O.P. AND PAINT</b>				
<b>5.1</b>	<b>P.O.P INTERNAL WALL</b>				
	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	70.00	SQ.MT		
<b>5.2</b>	<b>TEXTURE PAINT</b>				




	Providing and applying Texture paint grade Felux/Asian complete in all respect as per manufacture specification. (Quoted without Gst) basic rate for texture is 60 Rs. / sq.ft.)	10.00	SQ.MT		
	<b>6 FURNITURE-Tables , Teller Desk and</b>				
6a	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 drawer surface . All Tables should be independent units , placed not fixed to partitions.				
	<b>Table Top</b>				
	Table top shall be made from minimum 25mm thick post form laminated MDF board. All edges shall have machine-applied minimum 2mm thick PVC edge lipping. Top should have MS ivory /matching to top powder coated wire manager. Both sides of table should be laminated on inside and outside.				
	<b>Modesty Panel</b>				
	The Modesty panel will be of 19 mm commercial ply with laminate both sides in two or more colour 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.				
	<b>Drawer Pedestal</b>				
	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 2.0mm 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.				
	<b>Side Rack</b>				
	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 will be provided with lockable shutters. Shutters shall be having with “C”-shaped stainless steel handles of minimum 96mm length and locks complete as per drawing. complete in all respect				
	<b>CPU TROLLEY</b>				
	Providing and placing heavy duty CPU trolley, (125mm to 240mm adjustable CPU trolley made out of MS with white powder coating and lockable castors)				
	<b>Key board tray</b>				
	Providing and installing 2'-6" wide, 16" deep wooden laminated wooden key board, with heavy duty telescopic channels of approved make as specified , made out 19 mm thk. Comm. ply having 1 ¼" laminated edge at front and sides.				
<b>6.1</b>	<b>MANAGER TABLE :</b>				

	P/F Manager table (6'-0"x 2'-9") 2'-6" high and side Rack /storage units (3'-3" X 18" ) 2'-6" high with CPU trolley, drawer pedestal and key tray etc complete in all respect as specified above and as per details . Only difference is that manager table top , and side unit top should be finished with 12 mm thk. high density acrylic (Dupoint/samsung/ Marino) and rest of structure is laminated as specified above.	1	No.		
<b>6.2</b>	<b>Teller tables</b>				
	P/F Teller counter T3 each 5'-0" x2'-0") height 2'-6" with readymade CPU trolley, Chest of drawer and keyboard provision complete in all respect as specified above ( 6a) and as per detail. Apron finished with silver grey AICA LAMINATES INDIA PVT.LTD. GRADE -AL-FR-HPL C/P-MBA475, ( and orange central band 150 mm wide) and working surface top shall be finished with frosty white laminate. Rate to include soft board , shall be in orange on soft board panels and mounted on SS supports 50 mm above finished level of the table between every two counters. Fabric make – Beige shade Soft board size per table: Size 580 mm x 380 mm.	4	No.		
<b>6.3</b>	P/F Table for daftari 4'-0" x 2'-0" height 2'-6" with readymade CPU trolley, Chest of drawer and keyboard provision complete in all respect as specified above (6a) and as per detail.	1	No.		
<b>6.4</b>	P/F Officer table T-1 (5'-0"x2'-0") 2'-6" high and side Rack /storage units (3'-0" X 18" )2'-6" high with readymade CPU trolley, Chest of drawer and keyboard provision , complete in all respect as specified above and as per detail.	2	No.		

<p><b>6.5</b></p>	<p>Providing /Placing round table of size 3'-3" Dia with height 2'-6", with base of metal frame and Table top in 25 mm thick ply finished with 1 mm thick laminate, and edge finished with PVC matching colour 2 mm edge binding tape. Base metal frame shall be made of 50mm dia. CRCA pipe with RAL 7021 steel grey finish legs and 100 mmx100mm x 2mm CRCA sheet (ERP:3744) with RAL 7021 steel grey PC finish for fixing of table top and another base plate of required size at floor Lvl. complete in all respect as per attached design .</p>	<p>1</p>	<p>No.</p>		
<p><b>6.6</b></p>	<p><b>CASH COUNTER</b></p>				
	<p>Providing &amp; fixing two level Cash Counter as per layout plan, Writing top, Upper top, front projected face, sides and front apron all shall be made of 19mm thick comm. ply wood. Writing top and upper top, shall be made of 25 mm thk. post form laminated MDF Board of approved shade with approved edge profile as per approval. Sides and front apron Shall be made of 19mm thick comm. plywood The counter shall have CPU trolley, foot rest, key board tray as per specified above in head 6a,</p>	<p>1.52</p>	<p>Rmt.</p>		
	<p>Drawer unit consist of three drawer with telescopic sliding channels with all around boxing made of 19mm thk. Ply wood with vertical support of the table as one side. Top drawer to have a provision of dividers to keep cash. Rest drawer specifications same as per item no.5a. The item to include a mirror above working top size 2'x1'. And soft board with fabric mounted above at inside area. All exposed surfaces shall have to be laminated. (Size 4'-6" x 2'-9" deep and writing top at 2'6" ht. and upper top at 3'-6" ht.)</p>				
<p><b>6.7</b></p>	<p><b>P/F CUSTOMER'S WRITING</b></p>				

	P/F customer's writing table,3'-6" high, made of 19 mm thk. Commercial board with wooden lipping on exposed ends and laminate on all exposed surfaces .Table top shall have 12 mm thk. Glass for top fixed with S.S. buttons and vertical division for keeping forms in 12 mm thk. glass only. Below the divisions table to have check drop box and suggestion box. The glass shall be fixed as per design. The table top shall be of Size 5'-0" x 12" and height 3'-6".	1	NO		
6.8	Supplying and fixing of centre table 20" dia with base metal frame shall be made of 50mm dia. CRCA pipe with RAL 7021 steel grey finish legs and 100 mmx100mm x 2mm CRCA sheet (ERP:3744) with RAL 7021 steel grey PC finish for fixing of table top and anothe base plate at floor Lvl. The table top shall be made of 12 mm plywood finished with 12 mm high density acrylic sheet P-004-Solaris of Marino or equivalent (Dupoint/samsung), complete in all respect including rubbing the acrylic ti high gloss finish.	1	NO		
6.9	Providing & placing in position lounge chair (Godrej/ Featherlite/ Wipro/Equivalent ) having stainless steel frame/wooden frame, chrome plated/wooden /brass finished legs, velvet uphostry etc. complete as per selection and choice of Architect/ Bank's Engineer.(Basic price to be Rs. 15000/ chair).	2	No.		
	<b>(The Bank reserves the right to select any model/ series of base price mentioned from any of the above makes).</b>				
					
<b>7</b>	<b>CABINET</b>				
<b>7.1</b>	<b>LOW HEIGHT CABINATE</b>				

	<p>Providing and fixing storage cabinet 450 mm depth and 750 / 900/1200 mm high made out of 19mm thick Commercial plywood of approved make including complete lamination of 1 mm thk laminate inside and outside and the fixing of shelves at 400 mm to 450 mm c/c and the shutters shall be in 19 mm thick commercial ply and back covered with 8 mm commercial plywood , duly painted with anti-termite paint (on outer face) . Top shall be made of 25 mm thk. post form MDF Board of approved shade with edge moulding as per approval, The width of each shutter shall not exceed 18". The exposed edge of ply shall have wooden lipping, or rubber 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.</p>	16.30	SQ.MT		
<b>7.2</b>	<b>FULL HEIGHT CABINATE</b>				
	<p>Providing and fixing full height storage cabinet 450 mm Depth made out of 19mm thick Commercial plywood of approved make including the fixing of shelves at 400 mm to 450 c/c with rest of specifications same as 7.1 , complete in all respect as per approval and drawing.</p>	15.00	SQ.MT		
7.3	<p>P/F pantry cabinet 600 deep and 700 high, in 19 mm thick. BWR Waterproof ply below the existing rcc counter . Cabinet to have top row of drawer with cutlery tray of 550 mm width in one 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 of matching shade at exposed edge, hinges, Hardware, latches, magnetic catchers, telescopic channel, etc. of approved makes.</p>	1.30	SQ.MT		
	<p>The Front elevation area shall be considered for payment.</p>				

7.4	P/F pantry wall cabinet 300mm deep and 600mm high, in 19 mm thick. BWR Waterproof ply . 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, hinges, Hardware, latches, magnetic catchers,etc. of approved makes.	1.00	SQ.MT		
8	<b>MISCELINIOUS ITEMS</b>				
8.1	<b>FROSTING FILM</b>				
	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.	5.60	SQ.MT		
8.2	Providing and fixing Rectangular LED mirror made of premium quality "Saint Gobain" glass with smooth polished edge , Color Of The LED – Warm White, with a smart touch switch or sensor that makes it glow as soon as one approaches the mirror. complete as per manufacturer specification and approval from Bank/ Architect. Mirror Size 750 x 1000	1.00	Nos.		
					
8.3	P/F 12mm thk. Toughen glass shelf in D or rectangular shape below the mirror , fixed with SS fittings , complete in all respect. Length of shelve is 750 mm.	1.00	Nos.		
8.4	Fixing of existing pendent type hanging fire sprinkler to below location in false ceiling as per site condition complete in all respect ,as per instructions of Architect/ Bank's Engineer.	20.00	Nos.		
	<b>Total sum</b>		<b>RS,-</b>		

**SCHEDULE OF QUANTITIES HVAC WORKS**

<b>- VRF SYSTEM</b>					
<b>1.0</b>	<b>EQUIPMENT</b>				
<b>1.1</b>	<b>VARIABLE REFRIGERANT FLOW SYSTEM</b>				
	Supply, Installation, Testing and Commissioning of Variable Refrigerant Flow type multi unit air-conditioning system ( cooling and heating ) complete with indoor and outdoor units with individual remote controll and individual controller for cooling application as per the specifications and drawings. The quoted price should include clearances charges, local taxes, freight etc. VRF Shall have cut off arrangement after a particular set value of Supply air Temperature for AHUs, if any. Quoted price shall also be inclusive of loading, unloading, lifting & shifting at terrace level or other suitable locations as per drawing, positioning charges besides including charges towards structural steel supports, MS base frame duly painted & vibration isolation arrangement etc.				
	Make : Daikin /Toshiba/ Carrier/Blue star				
<b>1.1.1</b>	<b>OUTDOOR UNITS- Heat Pump</b>				
	Supply, Installation, Testing and Commissioning of air cooled variable refrigerant volume modular type Cooling & Heating application, each comprising of energy efficient multiple scroll compressors, and all accessories as per the specifications. All compressors shall be inverter type. The condensing units shall be suitable to work on cooling as well as heating mode. The condensing units shall be suitable for operation on 415 ±10% volts, 50Hz, 3 phase AC power supply and complete with auto check function for connection error, auto address setting, etc. The outdoor units shall be low noise type. ODU tubes & fins shall be provided with anti erosion coating to prevent erosion. . The outdoor units shall be of following capacities :				
	<b>VRV ODUs shall be capable of operating in following range :</b> <b>i. For Cooling : (-)5degC to 50degC</b> <b>ii. For Heating : (-)20degC to 15.5degC</b>				
	a. 14HP nominal capacity high COP outdoor unit comprising of Single module of requisite capacity.	No	1		
<b>1.1.2</b>	<b>INDOOR UNITS</b>				



	Supply, Installation, Testing and Commissioning of variable refrigerant volume modular type indoor units comprising of EEV & all accessories as per the specifications. The indoor units shall be suitable to work on cooling as well as heating mode. The indoor units shall be suitable for operation on 220 ±6% volts, 50Hz, 1 phase AC power supply. All Indoor Units shall have inbuilt Drain Pumps.  Quoted price shall be inclusive of Plug Top & necessary power cable.				
	Make : Daikin /Toshiba/ Carrier / Blue Star				
i	810Cfm Cassette Type (1.6TR)	No.	1		
ii	600Cfm Cassette Type (1.3TR)	No.	6		
ii	335Cfm Compact Cassette Type (1.0TR)	No.	1		
1.2	<b>REMOTE CONTROLS</b>				
i	Supply of Cordless handset type remote controls for the above indoor units.	No	8		
1.3	<b>CENTRALISED CONTROLLER</b>				
	Supply, Installation, Testing and Commissioning of main centralised controller as per specifications to hook up indoor units as mentioned above. Controller shall however, be suitable for minimum 64groups of indoor units & Outdoor Units. Centralised controller shall act as master controller for controlling of Heating -cooling mode of outdoor units and their associated indoor units.	No	1		
2.0	<b>PIPING</b>				
2.1	<b>COPPER REFRIGERANT PIPING</b>				
	Supply, Installation, Testing & Commissioning of high pressure copper refrigerant piping including R410a refrigerant of suitable size as required and duly insulated with 19mm/13mm thick closed cell elastomeric insulation with <b>class 'O' fire retardant properties</b> in tubing form. External Refrigerant piping shall be laid on GI covered ladder type cable trays. Piping inside occupied spaces shall be supported using MS hangers duly painted with black enamel paint. Entire refrigerant piping work shall be carried out in accordance with the specifications. MS sleeves of requisite size shall be provided at wall crossing. Quoted price shall be inclusive of necessary glass cloth and minimum two layers of UV protection paint to be applied over insulation for all exposed pipes of approved make. Piping shall be of following sizes :				
	Internal Refrigerant piping in exposed ceiling area & external refrigerant piping shall be laid on Ladder type cable trays. Cable trays used for external refrigerant piping shall be covered with GI cover.				
	<b>Pipe Size (O.D.)</b>	<b>Thickness of CSE Insulation</b>			
d.	28.6 mm	19 mm	RM	35	
e.	25.4 mm	19 mm	RM	10	
f.	22.2 mm	19 mm	RM	25	
g.	19.1 mm	13 mm	RM	30	
h.	15.9 mm	13 mm	RM	35	
i.	12.7 mm	13 mm	RM	25	
j.	9.5 mm	13 mm	RM	30	
k.	6.4 mm	13 mm	RM	20	
2.2	<b>FITTINGS</b>				

	Supply, Installation, Testing & Commissioning of following imported copper fittings to be provided in refrigerant pipe line.				
a.	Refnet Joints (Y- Joints)	No	10		
<b>2.3</b>	<b>CONDENSATE DRAIN PIPING</b>				
	Supply, Installation , Testing and Commissioning of GI medium class (Class 'B') pipes cut to required 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	25		
b.	40mm dia	RM	25		
c.	32mm dia	RM	15		
d.	25mm dia	RM	10		
<b>3.0</b>	<b>ELECTRICAL WORKS</b>				
<b>3.1</b>	<b>CONTROL &amp; TRANSMISSION WIRING</b>				
	Supply, laying, affecting connections and Testing of the following sizes of control cum transmission wiring to be laid in MS conduits between indoor units and outdoor units.				
	2C x1.5 Sqmm copper wiring	RM	120		
<b>3.2</b>	<b>CONTROLLER WIRING</b>				
	Supply, laying, affecting connections and Testing of the following sizes of control cum transmission wiring to be laid in MS conduits between indoor units and their wired remotes.				
	2C x1.5 Sqmm copper wiring	RM	5		
<b>TOTAL</b>				<b>Rs.</b>	

**ELECTRICAL INSTALLATION WORKS**

**SUMMARY**

<b>A. POINT WIRING</b>	<b>Rs.</b>	_____
<b>B. CONDUITING AND WIRING FOR TELEPHONE, COMPUTER &amp; T.V. SYSTEM .</b>	<b>Rs.</b>	_____
<b>C. SUPPLYING AND FIXING OF LIGHTING FIXTURES</b>	<b>Rs.</b>	_____
<b>D. EARTHING SYSTEM</b>	<b>Rs.</b>	_____
<b>E. DISTRIBUTION BOARDS</b>	<b>Rs.</b>	_____
<b>F. CABLES,MAINS,SUBMAINS &amp; CABLE TRAY</b>	<b>Rs.</b>	_____
<b>G. SUB DISTRIBUTION BOARDS</b>	<b>Rs.</b>	_____
<b>GRAND TOTAL</b>	<b>Rs.</b>	_____
	<b>LAKH</b>	_____

S.No.	Description		Qty	Rs.	Rs.
<b>A. POINT WIRING</b>					
<b>Note-</b>					
<b>Point wiring rates are inclusive of 2x2.5+1x1.5 sq mm FRLS PVC insulated stranded copper conductor FRLS wires for circuit and 1.5 sq mm insulated earth wire. All wire should be FRLS</b>					
1	Wiring for the following light points with 2X1.5+1X1.5 Sq.mm FRLS PVC insulated stranded copper conductor wires in concealed PVC conduits in F.ceiling / walls /ceiling as direc-ted including providing 6 amps flush type switches, 5 sided G.I Boxes for housing switc-hes and earth-ing comple-te as required.				
a.	First point controlled by one no. 6 amp switch.	Nos.	26		
b.	Loop Point	Nos.	41		
2	Wiring for 6 amps light plug outlets with 3x1.5 sq.mm PVC insulated stranded copper conductor wires in PVC Conduits in ceiling/walls/floor as direc-ted incl-u-ding providing 6 amps flush type 5 pin socket and 6 amps switch with cover plate, 5 sided G.I boxes for housing switches, sockets and earthi-ng complete as required. (for general areas/workstations)	Nos.	16		
3	Wiring for 6/16 amps light plug outlets with 3x2.5 sq.mm PVC insulated stranded copper conductor wires in PVC Conduits in ceiling/walls/floor as direc-ted incl-u-ding providing 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/workstations) <b>for VRV Indoor Units</b>	Nos.	8		
4	Providing and fixing 6 amps outlet on Light Point switch board including providing 6 amps flush type 5 pin socket and 6 amps switch with cover plate complete as required	Nos.	6		
5	Wiring for 3 nos 6 amps light plug outlets with 3x2.5 sq.mm PVC insulated stranded copper conductor wires in PVC Conduits in ceiling/walls/floor as direc-ted incl-u-ding providing 3 nos 6 amps flush type 5 pin socket and 1 no 6 amps switch with cover plate, 5 sided G.I boxes for housing switches, sockets and earthi-ng complete as required. <b>(for UPS Outlets)</b>	Nos.	12		

S.No.	Description		Qty	Rs.	Rs.
6	Wiring for 16 amps power outlet points with 4 sq.mm PVC insulated stranded copper conductor wires for the first power outlet and 2x4+1x2.5 sq.mm PVC insulated stranded copper conductor wires for the second outlet, in concealed PVC conduits in F.ceiling/ walls/Ceiling/floor ducts as directed including providing 16 amps flush type switch and 6 pin socket with cover plate, 5 sided G.I. outlet boxes for housing switches and socket, and earthing the third pin with 2.5 sq.mm PVC insulated copper conductor wires complete as required. <b>for ATM Machine</b>	Nos.	3		
7	Wiring for exhaust / Wall Fan points with 3x1.5 sq.mm PVC insulated stranded copper conductor wires in concealed PVC conduits in F.ceiling / Wall/Ceiling as directed including providing 6 amps flush type switches 6 amps 3 pin socket near exhaust fan/wall fan, 5 sided G.I. boxes for housing switches and 6 amps 3 pin socket outlet and earthing and complete as required.	Nos.	11		
8	Wiring for 16 amps power outlet points with 4 sq.mm PVC insulated stranded copper conductor wires for the first power outlet and 2x4+1x2.5 sq.mm PVC insulated stranded copper conductor wires for the second outlet, in concealed PVC conduits in F.ceiling/ walls/Ceiling/floor ducts as directed including providing 16 amps flush type switch and 6 pin socket with cover plate, 5 sided G.I. outlet boxes for housing switches and socket, and earthing the third pin with 2.5 sq.mm PVC insulated copper conductor wires complete as required.	Nos.	2		
9	Wiring for 16 amps power outlet points with 4 sq.mm PVC insulated stranded copper conductor wires for the first power outlet and 2x4+1x2.5 sq.mm PVC insulated stranded copper conductor wires for the second outlet, in concealed PVC conduits in F.ceiling/ walls/Ceiling/floor ducts as directed including providing 16 amps flush type switch and 6 pin socket with cover plate, 5 sided G.I. outlet boxes for housing switches and socket, and earthing the third pin with 2.5 sq.mm PVC insulated copper conductor wires complete as required.(Two power outlets shall be connected on each circuit)	Set of two	1		
<b>TOTAL CARRIED OVER TO SUMMARY</b>					

S.No.	Description		Qty	Rs.	Rs.
<b>B. CONDUITING AND WIRING FOR TELEPHONE , COMPUTER &amp; T.V. SYSTEM.</b>					
1	Providing and fixing of sheet metal enclose Krone Tag Block with following pairs consisting of necessary Back Mount Frame, disconnection modules and grommets complete as required.				
a	20 pair Telephone Tag Block and box	Nos.	1		
2	Supply,drawing and making connections with Telephone Main Junction box and Telephone Outlet Box with annealed tinned copper conductor, PVC insulated and PVC sheathed GI strip armoured / Unarmoured Telecommunication cable in Conduit Pipe from the P & T				
a	10 x (2 x 0.6mm ) armoured Telephone cable in Conduit Pipe	RM	40		
3	Wiring for VOICE from Jack Panel in data rack to computer workstation with Cat-6 voice cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type. This work includes supply and laying of CAT-6 cable in PVC conduits throughout the lenght, from the I/O hub to the point.	Nos.	10		
4	Wiring for computer networking from Jack Panel in data rack to computer workstation with Cat-6 computer cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, along with 02 nos. RJ 45 outlet, faceplate and mounting box complete of modular type, This work includes supply and laying of CAT-6 cable in PVC conduits throughout the lenght, from the I/O hub to the point.	Nos.	11		
5	Wiring for computer networking from Jack Panel in data rack to computer workstation with Cat-6 computer cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, along with 01 nos. RJ 45 outlet, faceplate and mounting box complete of modular type, This work includes supply and laying of CAT-6 cable in PVC conduits throughout the lenght, from the I/O hub to the point.	Nos.	3		

S.No.	Description		Qty	Rs.	Rs.
6	Supplying and fixing 9 U (Rack with glass door, opening in the front power panel 1 (horizontal), cable manager 1 lock & key).	Nos.	1		
7	Supply, Installation, Testing & Commissioning of 24 port Jack Panel.	Nos.	1		
8	Supplying and fixing Patch Cord-2 Meter- (DBPS Mounting Cord)	Nos.	24		
9	Supplying and fixing Patch Cord-1 Meter-	Nos.	24		
<b>TOTAL CARRIED OVER TO SUMMARY</b>					<hr/> <hr/>

S.No.	Description		Qty	Rs.	Rs.
<b>C. SUPPLYING AND FIXING OF LIGHTING FIXTURES</b>					
1	Supplying and fixing the following Lighting fixtures including lamps at site. Rate shall include all taxes and duties, transportation etc, complete.				
a.	1 x 36 watts Fluorescent Light Fixture as per Philips Cat No. TBS 185/136 M1 HPF	Nos	3		
b.	14 Watt W LED Light fixtures as per wipro Cat No.LD71-121-XXX-50-XX-iris with Glass cover	Nos	35		
c.	38 watts LED Light fixture as per Wipro Cat No. CRCO10R038HP57 (working Area) or Equivalent Philips make	Nos	30		
f.	Exhaust fan 300 mm sweep with 1400 rpm speed inclusive of gravity louver shutters.	Nos	3		
g.	Wall Fan (450 mm ) dia	Nos	8		
h.	LED Strip for cove lighting 15W per 5 M with driver and necessary installation fittings Led strip light (5mtr.) make As specified in tender document or approved by bank.	RM	50		
<b>TOTAL CARRIED OVER TO SUMMARY</b>					=====



S.No.	Description		Qty	Rs.	Rs.
<b>D. EARTHING SYSTEM</b>					
1	Providing and fixing in position the following copper strips and wires including providing all fixing accessories and effecting proper connections				
a.	GI tape 25mm x 6 mm	RM	25		
b.	Copper tape 25mm x 6 mm	RM	25		
c.	Cu wire 8 SWG	RM	25		
d.	10 Sq Copper wire including terminations etc as required For UPS /Server Rack Earthigs	RM	65		
2	Supply,Installation, testing and commissioning of Maintenance Free Earthing of make Electrolytic Earthing comprising of type 'K' copper 2.4 mm wall thickness,60 MM Dia, 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 Manhole chamber at the top for inspection purpose )	Nos.	2		
3	Supply, installation, testing and commissioning of sheet metal enclosed 300 x 300 x 200 ( D) mm insulated earth distribution board with 1 nos. 50 x 6 mm copper tinned earth bars suitable for 6/8 nos connections complete with all fixing accessories as required.	Nos.	2		
<b>TOTAL CARRIED OVER TO SUMMARY</b>					

S.No.	Description		Qty	Rs.	Rs.
E.	<b>DISTRIBUTION BOARDS</b>				
1	Supplying installing, connecting testing and commissioning of the following cubical type double door 3 rows vertical type 2mm thick 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 wires, or copper tapes, cable glands-/conduit entry bushes, bonding to earth and paint-ing. Also provide separate neutral busbar for each phase. Provide separate Earth Links. Use brass thimbles for connections of all wires.				
1	<b>Light &amp; Power Distribution Board</b>				
a.	Supply and installation of sheet metal enclosed double door 8 Way TPN DB, each phase consisting of 1 no. 63 amp DP ELCB(100 Ma) in each pahse and 1 nos. 100 amp. TPN MCB as a main incomer . <b>For A/C</b>	Nos..	1		
b	Supply and installation of sheet metal enclosed double door 12 Way TPN DB, each phase consisting of 12 Nos. 10/20 AMP SP MCB's and controlled by one number 100 mA sensitivity 63 AMPS DP ELCB backed up with 63 Amps DP MCB. <b>For Light and Power</b>	Nos..	1		
c	Supply and installation of sheet metal enclosed double door 12 Way SPN DB, each phase consisting of 12 Nos. 10/20 AMP SP MCB's and controlled by one number 63 Amps DP MCB. <b>(For UPS Supply)</b>	Nos..	1		
e	Supply, installation, testing and commissioning of 40 amps DP MCB in M.S enclosure for UPS input/Output including making connections etc as required.	Nos.	2		
f	Supply and installation of sheet metal enclosed double door 6 Way SPN DB, each phase consisting of 6 Nos. 10/20 AMP SP MCB's and controlled by one number 63 Amps DP MCB. <b>(For UPS Supply E LOBBY )</b>	Nos.	1		
2	Supply, installation, testing and commissioning of weather proof outdoor type enclosure with 63/40 A FP RCCB (300mA) -. This shall include cable entry boxes both for incoming and outgoing cable)	Nos.	1		
3	Supply & Fixing of Remotely controlled Emeregency push button Station for only OFF button Including relays/ Module and acessories including wiring and conduit locations at entry	Nos.	1		



**TOTAL CARRIED OVER TO SUMMARY**

S.No.	Description		Qty	Rs.	Rs.
<b>F.</b>	<b>CABLES,MAINS,SUBMAINS&amp;CABLE TRAY</b>				
1	Supplying ,laying, effecting proper connec-tions, testing & commissioning of the following sizes of 1.1 KV armoured/ unarmoured PVC insulated PVC sheathed aluminium /copper conductor cables conforming to IS : 1554 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.				
a.	3.5 c x 50 mm XLPE AL AR CABLE	RM	25		
b.	4 c x 16 sq.mm XLPE COPPER AR CABLE	RM	60		
c.	4 c x 16 sq.mm XLPE AL AR CABLE	RM	25		
d.	3c x 10 sq.mm Copper Flexible Cable for UPS Input /Output Supply	RM	75		
2	Supplying and making terminal joints for the following size of 1.1 KV PVC insulated copper conductor armoured cables including providing heavy duty copper terminal crimping lugs, solder, insulation tape, approved sealing epoxy compound,Single compression brass cable glands, effecting gland connec-tions and effecting terminal connections to the equipment complete as required.				
a.	3.5 c x 50 mm XLPE AL AR CABLE	Jt	2		
b.	4 c x 16 sq.mm XLPE COPPER AR CABLE	Jt	2		
c.	4 c x 16 sq.mm XLPE AL AR CABLE	Jt	4		
d.	3c x 10 sq.mm Copper Flexible Cable for UPS Input /Output Supply	Jt	6		
<b>TOTAL CARRIED OVER TO SUMMARY</b>					

S.No.	Description	Qty	Rs.	Rs.
G.	<b>SUB DISTRIBUTION BOARDS</b>			
1	<p><b>Sub Distribution Boards</b></p> <p>Design, manufacture, supplying, assembling at site, installing, testing and commissioning of the following cubical type, dead front, 2mm thick sheet steel enclosed, free standing indoor type extendible Sub-distribution Boards 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.</p> <p>a. The Sub Distribution Board - 1 for Light &amp; Power SDB-1 shall consists of :</p> <p><b>INCOMER</b></p> <p>Main Incomer 1 No 125 Amp 4 Pole Manual Change over switch &amp; 125 amps TPN MCCB (35 KA) terminals to receive 3.5 x 50 sq. mm AYFY cable connection on one side and Busbar connection on the other side.</p> <p><b>BUSBARS</b></p> <p>200 amps 4 pole busbar chamber of suitable length with Copper busbars. All busbars and interconnections shall be of suitable size copper strips current density of copper shall not be more than 1.6 Amps/ sq.mm provide 100% capacity for neutral bus bar.</p> <p><b>INDICATING PANEL</b></p> <p>3 nos phase indicating lamps each backed up with MCB and switch shall be provided for incomer.</p> <p>Provide multifunction meter as a main incomer</p> <p><b>OUTGOINGS</b></p> <p>4 Nos.63 A TPN MCB (10 kA) suitable to receive 4 x 16 sq. mm AYFY Cable</p> <p>3 Nos. 32/40 A TPN MCB (10 kA) suitable to receive 4 x 6 sq. mm AYFY Cable (2 Nos for DB and 1 no for spare)</p> <p>2 Nos. 63 A DP MCB (10 kA) suitable to receive 3 x 10 sq. mm Copper Flexible Cable <b>for UPS Supply</b></p> <p>The Sub Distribution Board -1 as described above and specifications complete.</p>	Set	1	
	<b>TOTAL CARRIED OVER TO SUMMARY</b>			

SUMMARY OF CONTRACT:

S.NO.	ITEM	UNIT	AMOUNT.
1	INTERIOR FINISHING WORKS.	RS/-	
2	ELECTRICAL WORKS.	Rs/-	
3	AIR CONDITIONING WORKS.	Rs/-	
	SUB TOTAL	Rs./-	
4	DISCOUNT IF ANY	Rs/-	
	TOTAL =	RS/-	
	GST EXTRA AS APPLICABLE		