	FURNISHING WORKS OF ECCB OFFICE, FARIDABAD, HARYANA  SUMMARY SHEET							
S. No.	ITEMS	AMOUNT						
I	INTERIOR WORK							
II	ELECTRICAL WORK							
III	AC WORK							
	GST Extra  TOTAL (I+II+III)							

	DETAILED SPECIFICATIONS FOR BILL OF QUANTITIES OF FURNISHING WORK OF ECCB OFFICE, FARDIDABAD, HARYANA							
01.11	Description of item for ECCB OFFICE		071	D.4.T.E.	444011117			
SL No	PARTICULARS	UNIT	QTY	RATE	AMOUNT			
1	FAÇADE OF ENTRANCE DOOR							
	Providing and fixing in position Aluminium composite panel boxing with PVDF coating & LDPE core laminate Eurobond / Alukbond exterior grade 4 mm thick with composite of ( 0.5mm-3mm - 0.5mm ) including fabrication for the same with aluminium sections, required hardware, silicon sealent ( Dow Corning 789 masking tape, necessary scaffolding etc.as detailed drawing On:-Complete in all respets.		275					
2	FALSE CEILING (GYPSUM BOARD)							
	Providing and fixing Gypsum false ceiling as per drawing including of providing and fixing G.I. Frame work shall comprise of G.I. perimeter channel (MF-6A) of size 0.50mm thick having one flange of 19.6mm and another flange shall be of size 29.6mm and a web of 26.6mm along with perimeter of ceiling, screw fixed to the beam to the required curvature with nylon sleeves and screws at not exceeding 610mm centers. Then suspending G.I. intermediate channel (MF-7) of size 45mm, 0.9mm thick with two flanges of 15mm each bent to the required curvature by cutting both its flanges. Suitable bracing to be provided where ever the flanges are cut with 0.9mm G.I. Flat and nuts and bolts at specific positions and thereafter at1220mm centers with ceiling angle of width 25mm x 10mm x 0.50mm thick fixed to soffit with G.I. cleats and steel expansion fasteners as per specification of India gypsum at a distance of 2'0" c/c both ways complete with 12.5mm board and all necessary perimeter channels etc. The joints to be properly mended with paper tapes and gypsum compound all complete. The boards are to be jointed and finished which includes filling and finishing the tapered and square edges of the boards with jointing compound and fiber tape suitable for Gypsum board. A layer up to of 3.00mm thickness of Veneer Plaster is applied followed by two coats of topcoat (primer) at the face of board to give smooth seamless finish. 2 or more coats of plastic emulsion paint (roller finish) of approved shade and make shall be applied. The rate should include the full completion of the ceiling. At the time of handing over the site all necessary repairing work to be considered if required. The work to be completed as per specification , approval of the bank. No Drop or design(if any )will be considered as extra measurement it will be considered flat ceiling. (Only plan area to be measured for payment). No extra payment will be made for the cutting of light points , stain glass,cove lighting etc. The measurement will be taken in one level , rate s	SQ.FT.	925					
	GRID FALSE CEILING ( 600mm X 600mm )  Providing and fixing suspended false ceilingconsisting of Armstrong/ Decophone or equivalent make 600mm x 600mm Tiles with tegular edges, slim line suspension system grid, Classic fine textured or approved pattern, on G.I frame work Complete in all respect as per manufacture's specifications, designs and architect's approval. Rate quoted to include cost of providing support framework formed of perimeter channels for fixing light fixtures, AC grills/diffusers etc. Also to provide concealed perimeter channel support as required to support modular grid ceiling sections at junction between gypboard false ceiling and modular grid tile ceiling. Rates to include Providing and fixing 50 mm Metal Axio	SQ.FT.	713					
4	PAINTING							
	Providing & applying white plastic Emulsion paint of asian paints / ICI DULUX / Berger and Sporty Yellow _x 104 Shade of Royal luxury Emulision of Asian Paints in minimum 2 coats including scrapping opening of existing cracks, filling up to "V" cracks with epoxy expandable putty to required depths, marking good weak plastered /unplastered surfaces with cement plaster wherever ruquired Item to include plaster of paris primer, palti & marking good existing surface to receive new paint including cleaning on completion work etc. Complete in all respects.		0					
5	MAIN ENTRANCE DOOR : (BRANCH & MEETING)							
	Providing and fixing front Frameless Patch Fitting Door with 12mm thick toughened glass with frame less glass fittings joining 2 glass & double action floor springs (Hettich/Dorma/Godrej) as per design. The item includes providing and fixing S.S. handle not less than 600mm long on both side of glass, locks and fittings (Haffle/ Hettich/ Ozone) as per the manufacturer's specifications etc. complete to the satisfaction of Architect/ Bank's Engineer.		79					

6	FIXED GLASS MAIN ENTRANCE (BRANCH, BM & MEETING)			
	Providing & fixing 12mm thick toughend fully Glass Partition in front of cabins for Manager and also Branch Front Entrance, glass fixed with S.S. clamps on sides and top & S.S. u-channel in the ground as per detail drgs. and complete to the satisfaction of Architect/ Bank's Engineer.	SQ.FT.	190	
7	FRONT OFFICE COUNTER			
	Providing and Fixing in position Froant office counter 2'-6" wide as per drawing no.(1-A,1-B,1-C,1-D & 15) Comprising of the Following complete in all respects:-			
	Including side unite size : 3'-0"x1-6"x2-6"			
(i)	Working top made with <b>18mm Thick Fire Resistanat HDHMR Board</b> finished with 1mm thick laminate. Outside edge of the working top small be provided with 1 1/4" x 1" Teak/steem bech wood moulding finish with melamine polish. Inside edge will be provided with 1/2" x 1" T.W. nbeading patti with melamine finish.			
(ii)	Vertical facia (Apron) made with <b>18mm Thick Fire Resistanat HDHMR Board</b> finished with 1mm laminate with 1mm thick laminate with 1mm thick Groove at thick Groove at the joint of laminate of two different shades .			
(iii)	Vertcal drop ( horizontal band ) shall be provided on the facia below the working top made with 18mm Thick Fire Resistanat HDHMR Board finished with 1mm thick laminate with provision for concealed light. 1mm thick Groove shall be provided at the joint of two different shades of laminate.			
(iv)	Glazed partition above working top to be provided with 12mm thick clear glass cut glass cut to the standard shape fixed to partition as per fixing details and to boxing concealed S.S Finished "D" brackets as shown in the drawing The exposed edges of the glass shall be finished in mirror polish.			
(v)	3'-10" High Boxing(10" X 10') made with <b>18mm Thick Fire Resistanat HDHMR Board</b> finisfed with 1mm thick laminate including providing and fixing 6mm thick square frosted glass at a height 3'-2" above finished floor level.			
(v)	3'-10" High Boxing(10" X 10') made with <b>18mm Thick Fire Resistanat HDHMR Board</b> finisfed with 1mm thick laminate including providing and fixing 6mm thick square frosted glass at a height 3'-2" above finished floor level.			
(vi)	1'-9" high Boxing (5'x5") made with <b>18mm Thick Fire Resistanat HDHMR Board</b> finished with 1mm laminate .			
(vii)	Vertical supports made with <b>18mm Thick Fire Resistanat HDHMR Board</b> finished with white enamel paint.			
(***)				
(viii)	Telescopic CPU stand / ready made keyboard tray shall be provided of approved model and make.			
(ix)	Footrest made with T W memder of size 4" x 1 1/2" finished With french Polish.			
(x)	Drawer units as per drawing shall be provided with multipurpose godrej locks in Each Drawer. Facia of drawer unit shall be finished with 1mm thichlaminate and all other sides shall be finished with white enamel paint the drawer will be provided with handles (Stainless Steel finish) and channels as per approval of the project Consultant / Bank			
(xi)	Boxing as per Drawing made with <b>18mm Thick Fire Resistanat HDHMR Board</b> finished with Synthetic enamel paint shall be provided below the table top I for electrical conduiting and at the LAN Cabling/Telephone wire conduiting.			

		1	I		
	The item to include all necessary hardware and fitting in stainless steel finish lipping to all edges and making provision only for electrical fitting behind the front. Vertcal drop and also in the 10"x 10" boxing as shown in the drawing also in the 10"x 10" boxing as shown in the drawing. Necessary beadings with melamine polish for fixing for fixing the glass are to be provided.	R.FT.	0		
	COLUD FULL LIFECULT PARTITION				
7	SOLID FULL HEIGHT PARTITION				
	Providing and fixing solid partition, the framing shall made out of aluminium hollow section of 50mm x 50mm size 1.5mm thick of JINDAL / INDAL as internal frame structure placed horizontally & vertically at max distance of 2'-0" x 2'-0" center to center. Fixing 12mm Thick Fire Resistanat HDHMR Board on both sides with 1.0mm thick laminate on top of approved shade with groove pattern as per instructions of Architect. The rate shall include the cost of providing skirting of 100mm wide lined with 1mm thk laminate and providing & fixing a border at top of 100mm wide lined with 1mm thk laminate complete. Laminate Should be considered up to two or three color combination. The edge beadings with steam beach wood should be finished with melamine polish if required, frame work above false ceiling done shall not be measured but contractor may factor it while quoting there rates as measurment up to false ceiling IvI The rate inclusive of providing & fixing of required flush door of 37mm thick approx. with 1.0mm th.laminate both side with steem beech wood chowkhat of size 75mm x 65mm approx and Item includes door closers, godrej locks & mortice door lock Heavy-duty SS ball bearing butt hinges 100 x 5.5 mm (4 Nos. per shutter) and with screws etc. The shade of laminate finish to be got approved from Bank. All as per the design and instructions Bank.  Note: - For the purpose of payment partition shall be measured including the area of door / door frames up to false ceiling height.  Framework shall be rigidly secured to floor, bottom of slab & existing walls at 2'-0" c/c with dash fasteners.		798		
8	PARTLY GLAZED FULL HEIGHT PARTITION				
	Providing and Fixing in position partly Glazed Full Height Partition work as shown in the drawing no:- in framing shall made out of aluminium hollow section of 50mm x 50mm size 1.5mm thick of JINDAL / INDAL with 12mm Thick Fire Resistanat HDHMR Board on both sides finished with 1 mm thick laminate of approved shade and colour as shown in drawing.				
	Item to include 8mm thick glass with etching and frosting as per design and 50mm x 50mm size 1.5mm thick of JINDAL / INDAL for door sides and glass sides and steam beach wood door frame to take 8mm thick glass with etching and frosting				
	All exposed <b>steam beach</b> surfaced <b>steam beach</b> Surfaces to be finished in melamine polish of matching laminate colour as directed including all necessary stainless steel finish fittings / hardwara door closers, door stoper, godrej locks and wood preservative paint etc. as per list of approved matericl and as approved by the project Consultant / Bank Complete in all respects. Note: - In Case of false ceiling the Vertcal <b>50mm x 50mm size</b> 1.5mm thick of JINDAL / INDAL to be fixed with pucca ceiling but the area of partition payable will be below the false ceiling only)	CO ET	150		
9	PARTLY GLAZED PARTITION FOR CASH COUNTER			-	
3	Providing and fixing in position in 7'-7" high partly glazed partition for Cash Cabins as per drawing nos . (2-A, 2-B, 2-C, 2-D, & 2-E) including door drawing no (12) in frame work in framing shall made out of aluminium hollow section of 50mm x 50mm size 1.5mm thick of JINDAL / INDAL shown in the drawing with 12mm Thick Fire Resistanat HDHMR Board on both sides finished with 1mm laminate of approved shade and colour as shown in drawing Itam to include 8 mm thick glass with etching and frosting as per design and aluminium hollow section of 50mm x 50mm size 1.5mm thick of JINDAL / INDAL for door sides and glass sides and steam beach Door frame to take 8mm thick glass with etching and frosting.				

10	all exposed <b>steam beach</b> surfaces to be finished in melamine polish of matching laminate colour as directed all necessary stainless steel finish fittings / hardwara, door closers, godrej locks & mortice door lock, B130 and wood preservative paint etc.as per list of approved material and as approved by the project Consultant / bank complete in all respects.  PARTLY GLAZED LOW HEIGHT PARTITION		0		
	Providing and fixing in position partly glazed low height partition aluminium hollow section of 50mm x 50mm size 1.5mm thick of JINDAL / INDAL with 12mm Thick Fire Resistanat HDHMR Board on both sides finished with 1mm thick laminate of approved make and shade as shown in drawing No;- Item to include 12 mm thick glass (clear / frosted) to be fixed as shown in drawing. The exposed edges of the glass to be finished in mirror polished steam beach runner should be melamine polished in matching colour of laminate etc complete in all respects.	SQ,.FT.	236		
11	BRANCH MANAGER TABLE			+	
	Providing and fixing in position Branch Manager table of size ( 6'-0" x 3'-0" ) as per drawing no Including Side storage (3'-0"x1-6"x2-6") ( Credenza ) by using 18mm Thick Fire Resistanat HDHMR Board for top and 18mm Thick Fire Resistanat HDHMR Board for all other horzontal thick plywood for top and 18mm Thick Fire Resistanat HDHMR Board for all other horzontal and vertical member Telescopic CPU stand ready made keyboard try shall be provided of approved modeland make footrest made with T.W.member of size 4" x 1 1/2" finished with french polish. Side storage ( Credenza ) as per drawing shall be provided . Facia of side storage ( Credenza ) shall be finished with 1mm laminate as shown in the drawing and all other sides shall be laminate as shown in the drawing and all other sides shall be provided with handles ( Stain less finish ) and channels as per approval of the project consultant / bank. All exposed plywood suraces to be finished with 1mm thk. Laminate of approved make & shade and all exposed edges of table top & HDHMR Board Verticals to have 1" x 1/4" T.W.Lipping . All exposed T.W. Sections to be melamine and internal surfaces to have white enamel paint as directed . Itam to include HDHMR Board boxing all necessary hardwara and fittings in Stainless steel finish lipping to all edges etc. complete in all respects. measurement will be taken upto the false ceiling visible height in case of full height partition. The frame work will be cladded with 12mm Thick Fire Resistanat HDHMR Board both sides and to be finished with approved 1 mm laminate (color with vertical grain) as per design with adhesive. 3" high laminated skirting to be fixed bottom side of the partition. Extra frame work to be fixed for fixing glass. In the glazed partition 10mm thk. Etched glass with sand blusting/ granular blasting to be provided duly fixed with . wooden lipping 37mm x 19 mm all complete duly polished. The work to be completed as per design approval of the archiect.	Nos	1		
12	OFFICER TABLE			$\rightarrow$	
12	Providing and fixing in position <b>OFFICER</b> table of size ( 4'-6"/5'-0"x 2'-6"x2'-6") as per drawing no Including Side storage (3'-0"x1-6"x2-6") (Credenza) by using <b>18mm Thick Fire Resistanat HDHMR Board</b> for top and <b>18mm Thick Fire Resistanat HDHMR Board</b> for all other horzontal thick plywood for top and <b>18mm Thick Fire Resistanat HDHMR Board</b> for all other horzontal and vertical member Telescopic CPU stand ready made keyboard try shall be provided of approved modeland make footrest made with T.W. member of size 4" x 1 1/2" finished with french polish. Side storage ( Credenza ) as per drawing shall be provided . Facia of side storage ( Credenza ) shall be finished with 1mm laminate as shown in the drawing and all other sides shall be laminate as shown in the drawing and all other sides shall be finished with white enamel paint . The side storage ( Credenza ) shall be provided with handles ( Stain less finish ) and channels as per approval of the project consultant / bank. All exposed plywood suraces to be finished with 1mm thk. Laminate of approved make & shade and all exposed edges of table top & <b>HDHMR Board</b> Verticals to have 1" x 1/4" T.W.Lipping . All exposed T.W. Sections to be melamine and internal surfaces to have white enamel paint as directed . Itam to include <b>HDHMR Board</b> boxing all necessary hardwara and fittings in Stainless steel finish lipping to all edges etc. complete in all respects. measurement will be taken upto the false ceiling visible height in case of full height partition. The frame work will be cladded with <b>12mm Thick Fire Resistanat HDHMR Board</b> both sides and to be finished with approved 1 mm laminate (color with vertical grain) as per design with adhesive. 3" high laminated skirting to be fixed bottom side of the partition. Extra frame work to be fixed for fixing glass. In the glazed partition 10mm thk. Etched glass with sand blusting/ granular blasting to be provided duly fixed with . wooden lipping 37mm x 19 mm all complete duly polished. The work to be completed as p	Nos	9		

13	FULL HEIGHT STORAGE / LOW HEIGHT STORAGE / BACK STORAGE/OVER HEAD			
	out of 18mm Thick Fire Resistanat HDHMR Board finished with 1.0mm laminate in all exposed areas. The Shutter to be made out of 18mm Thick Fire Resistanat HDHMR Board in the front cladded with 1.0mm laminate (color, vertical grain), and bottom made out of 8mm Thick Fire Resistanat HDHMR Board duly painted in matching tone and shelves 18mm Thick Fire Resistanat HDHMR Board to fixed inside storage. The shutters to be made out of 18mm Thick Fire Resistanat HDHMR Board. The necessary locks, handles, etc to be provided. 3" x1/2 wooden skiriting to be provided duly polished as per matching tone all along the visible areas. Inside of the unit to be 1.0 thk laminate finish. All the exposed edeges of the Fire Resistanat HDHMR Board to be coverd with wooden lippings/mouldings duly polished all complete. All as per the design and instructions Bank.		520	
14	Semi Glazed Door (3'-3"x7'-0")			
14	,			
	Providing and fixing made in 35mm thick Flush door with 1mm lamination form both sides and 8mm plain glass with Etching / Acid texture border fixed with Steam beach molding duly melamine polished. 35mmX 12mm steam beach Lipping to be provided to all the edges of the door. Rate also to include the cost of <b>Door Frame made Steam beach wood fixed in partition or wall</b> Door Frame should be fixed properly to the Partitions, All Hardware should be of Brass / SS Brush finish with ISI mark. Hardware includes Concealed Door closer, Cylindrical Lock, Door stopper and other standard needs. All as per the design and instructions Bank.		0	
	One of Decay (OLOW OLOW TLOW)			
15	Semi Glazed Door (3'-0"/ 2'-6"x7'-0")			
	Providing and fixing made in 35mm thick Flush door with 1mm lamination form both sides and 8mm plain glass with Etching / Acid texture border fixed with Steam beach molding duly melamine polished. 35mmX 12mm steam beach Lipping to be provided to all the edges of the door. Rate also to include the cost of <b>Door Frame made Steam beach wood fixed in partition or wall</b> Door Frame should be fixed properly to the Partitions, All Hardware should be of Brass / SS Brush finish with ISI mark. Hardware includes Concealed Door closer, Cylindrical Lock, Door stopper and other standard needs. All as per the design and instructions Bank.	Nos.	4	
16	Solid Doors ( 3'-0" & 2'-6" x7'-0"):-			
	Same as above (17), but the Door Frame should of best quality steam beech wood of with out Glass. Instead of glass, matching laminate on plywood to be used for maintaining uniform appearance. All as per the design and instructions Bank.	Nos.	0	
17	Supplying and fixing of Dorma / GEZE/ Dline / Hardwyn/Godrej or approved equivalent <b>Door Closer</b> for wooden door.	Nos.	4	
18	Supplying and fixing of mortice door lock Hardwyn make HML-480 Lock Body 304 Stainless Steel. (in BM Cabin,store room .)	Nos.	4	
19	Supplying and fixing of <b>door Stopper</b> SS Grade 304,HESSF-2C HARDWYN Make.	Nos.	4	
20	MEETING TABLE (15'-0"X4'-0"X2'-6")			
	Supplying and installation of Table as per the following description and design: Table top shall be made from <b>18mm Thick Fire Resistanat HDHMR Board</b> with equal sized 10mm thick back painted toughened glass with polished edges hole cut for popup box for DATA/ UPS. with necessary intermediate support. as per detail drawings Exposed surfaces of the table shall have laminate All internal surface will have 0.80 mm thick balacing laminate. The work to be completed as per design and approval of the architect.	Nos.	1	
21	SOFT BOARD / NOTICE BOARD :-			
	Providing and fixing soft board with necessary framework with 12mm BWR plywood on top 12 jolly board to be fixed finished with fabric @Rs80, with necessary mouldings duly polished along the periferi. All as per the design and instructions Bank.	SQ.FT	25	

- 00	WALL DANIELLING (DDANIGUS ATM)				
22	WALL PANELLING (BRANCH& ATM)  Fabricating and fixing wall/column paneling, the framing shall made out of aluminium hollow section of 65mm x 37mm size 1.5mm thick of JINDAL / INDAL at spacing not exceeding 600mm bothways (horizontal and vertical). Paneling framework to be secured to wall surface/column surface. Paneling framework to be clad on one side with 12mm Thick Fire Resistanat HDHMR Board finished with 1.0mm thk laminate including skirting of 100mm high & 12mm x 12mm groove at skirting level. All as per the design and instructions Bank.	SQ.FT	685		
	TOTAL AMOUNT ( INTERIOR WORK )				
	TOTAL AMOUNT (INTERIOR WORK)				
	RECOMMENDED MAKE TO BE USED				
SR.	DESCRIPTION		MΔKE	/ BRANDS	<u> </u>
1		CENTURY			
2		CENTURY			
3	, ,	CENTURY			
4		CENTURY			
5		CENTURY			
6	Lipping & Moulding	First Class	Teak W	'ood	
7		Gypsum Ir	ndia, Sai	nt - Gobaiı	n Gyproc
8	Grid Ceiling	Armstrong	, Dexun	е	•
9	GI Support system for False Ceiling	GYPSTEEL	_ ULTRA		
10	Adhesive	Fevicol Sh	l.		
11		OZONE/Do		,	
12		Modi/Asah	\ //		in
13	Aluminium	Jindal/ Hir			
14		OZONE/Do			
15		OZONE/Do	orma /Go	odrej)	
		Vista			
16		Nerolac / A			
17		,			niseal by ICI
18		ACC / Am			
19		Solignum/			niseal
20	, 0	Kohler / H	indware		
21	CP fittings	Jaguar			
	GI pipe	Jindal/Bhu			
		Nitco/Kaja	ria		
24	Overhead Water tank	Sintex			

1- The contractor is strictrly advised to use the makes sp 2- The Plywood used for the work shall be BWR ( Boiling	ecified/approved by the Bank/Architect, unspecified items will not be paid until they are changed with the specified ones. water proof range) confirming to IS 303.	
Place:		
Date:	Signature of contractor with seal	

	DETAILED SPECIFICATIONS FOR BILL OF QUANTITIES OF ELECTRICAL WORK OF ECCB OFFICE, FARIDABABD, HARYANA							
	ELECTRICAL WORKS							
S.No.	DESCRIPTION OF WORKS	UNIT	QTY	RATE	AMOUN			
1	Light Primary Points in PVC Conduit - Point Wiring for light points, controlled through modular switches complete with PVC boxes & cover plate - The point wiring shall be done with 3x 1.5 sq.mm Fire Resistant Low smoke Low Halogen stranded Cu. Wire in PVC conduit pipe (HMS Grade) concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600 mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, modular switch complete with PVC box & cover plate, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc. The job shall be complete & to the entire satisfaction of the Bank. Circuit wiring to be included in the point wiring rates. The circuit wiring starts from DB to point control box/ switch box using Fire Resistant Low smoke Low Halogen stranded Cu. Wire 2x2.5 sqmm & 1x2.5 sqmm earthing (min size) in 20/25/32 mm PVC conduit. All the wiring shall be carried out in recessed conduits unless instructed by Architect / Engineer in charge	Each	60					
2	Light Primary Points in PVC Conduit - Point Wiring for light points, controlled through modular switches complete with PVC boxes & cover plate - The point wiring shall be done with 3x 1.5 sq.mm Fire Resistant Low smoke Low Halogen stranded Cu. Wire in PVC conduit pipe (HMS Grade) concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600 mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, modular switch complete with PVC box & cover plate, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc. The job shall be complete & to the entire satisfaction of the Bank. Circuit wiring to be included in the point wiring rates. The circuit wiring starts from DB to point control box/ switch box using Fire Resistant Low smoke Low Halogen stranded Cu. Wire 2x2.5 sqmm & 1x2.5 sqmm earthing (min size) in 20/25/32 mm PVC conduit. All the wiring shall be carried out in recessed conduits unless instructed by Architect / Engineer in charge		15					
3	Light Secondary Points PVC Conduit - Point Wiring for light points interlooped from the primary point. The secondary point wiring shall be done with 3x 1.5 sq.mm FRLSH (Fire Resistant Low smoke Low Halogen) stranded Cu. Wire in PVC Conduit (HMS Grade) concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600 mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, modular switch complete with MS box & cover plate, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc. The job shall be complete & to the entire satisfaction of the Bank. All the wiring shall be carried out in recessed conduits unless instructed by Architect / Engineer in charge	Each	20					
4	5/6A Primary point in PVC Conduit:- Supply & Installation of point wiring for Raw power plug points on workstations / table/ wall using 2X2.5 + 1x2.5 Sq.mm FR LSH ( Fire Resistant Low smoke Low Halogen) copper conductor PVC sheathed flexible wire pulled from distribution board through PVC Conduit pipe (HMS Grade) concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. Each point consisting of 1 nos of 6/10A , 3/5 pin sockets & 1 No.,6/10A Switch , wired together forming one point. The earth wire of green color only. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc. The job shall be complete & to the entire satisfaction of the Bank. The above includes supply & fixing modular cover plates, base plates, PVC box/ Gang box in brick wall by making necessary chase/ recess and making good the same. All switches sockets and accessories must be modular. All new points must be provided in concealed /recessed conduit unless directed by architect / engineer in charge Interconnections to movable furniture, if any, shall be done using flexible PVC Conduit with end couplers.	Each	12					

5	5/6A Secondary point in PVC Conduit:- Supply & Installation of point wiring for Raw power plug points on workstations / table/ wall using 2X2.5 + 1x2.5 Sq.mm FR LSH ( Fire Resistant Low smoke Low Halogen) copper conductor PVC sheathed flexible wire pulled from nearby point through PVC Conduit pipe (HMS) concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. Each point consisting of 1 nos of 6/10A, 3/5 pin sockets & 1 No. 6/10A Switch, wired together forming one point. The earth wire of green color only. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc. The job shall be complete & to the entire satisfaction of the Bank. The above includes supply & fixing modular cover plates, base plates, PVC box/ Gang box in brick wall by making necessary chase/ recess and making good the same. All switches sockets and accessories must be modular. All new points must be provided in concealed/recessed conduit unless directed by architect / engineer in charge Interconnections to movable furniture, if any, shall be done using flexible PVC Conduit with end couplers.	Each	6	
6	UPS Primary point in PVC Conduit:- Supply & Installation of point wiring for UPS points on workstations / table/ wall using 2X2.5 + 1x2.5 Sq.mm FR LSH ( Fire Resistant Low smoke Low Halogen) copper conductor PVC sheathed flexible wire pulled from distribution board through PVC Conduit pipe (HMS Grade) concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. Each point consisting of 3 nos of 6/10A , 3/5 pin sockets & 1 No.,6/10A Switch , wired together forming one point. The earth wire of green color only. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc. The job shall be complete & to the entire satisfaction of the Bank. The above includes supply & fixing modular cover plates, base plates, PVC box/ Gang box in brick wall by making necessary chase/ recess and making good the same. All switches sockets and accessories must be modular. All new points must be provided in concealed/recessed conduit unless directed by architect / engineer in charge Interconnections to movable furniture, if any, shall be done using flexible PVC Conduit with end couplers.	Each	15	
7	UPS secondary point in PVC Conduit:- Supply & Installation of point wiring for UPS points on workstations / table/ wall using 2X2.5 + 1x2.5 Sq.mm FR LSH ( Fire Resistant Low smoke Low Halogen) copper conductor PVC sheathed flexible wire looped from nearest UPS point through PVC Conduit pipe (HMS Grade) concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. Each point consisting of 3 nos of 6/10A , 3/5 pin sockets & 1 No., 6/10A Switch , wired together forming one point. The earth wire of green color only. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc. The job shall be complete & to the entire satisfaction of the Bank. The above includes supply & fixing modular cover plates, base plates, PVC box/ Gang box in brick wall by making necessary chase/ recess and making good the same. All switches sockets and accessories must be modular. All new points must be provided in concealed/recessed conduit unless directed by architect / engineer in charge Interconnections to movable furniture, if any, shall be done using flexible PVC Conduit with end couplers.	Each	5	
8	15/16A Primary point in PVC Conduit:- Supply & Installation of point wiring for Raw power plug points on workstations / table/ wall using 2X4 + 1x4 Sq.mm FR LSH ( Fire Resistant Low smoke Low Halogen) copper conductor PVC sheathed flexible wire pulled from distribution board through PVC Conduit pipe (HMS Grade) concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. Each point consisting of 1 nos of 16/20A, 3/5 pin sockets & 1 No., 16/20A Switch, wired together forming one point. The earth wire of green color only. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc. The job shall be complete & to the entire satisfaction of the Bank. The above includes supply & fixing modular cover plates, base plates, PVC box/ Gang box in brick wall by making necessary chase/ recess and making good the same. All switches sockets and accessories must be modular. All new points must be provided in concealed /recessed conduit unless directed by architect / engineer in charge Interconnections to movable furniture, if any, shall be done using flexible PVC Conduit with end couplers.	Each	12	

9	15/16A Secondary point in PVC Conduit:- Supply & Installation of point wiring for Raw power plug points on workstations / table/ wall using 2X4 + 1x4 Sq.mm FR LSH (Fire Resistant Low smoke Low Halogen) copper conductor PVC sheathed flexible wire pulled from nearest power point through PVC Conduit pipe (HMS Grade) concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. Each point consisting of 1 nos of 16/20A, 3/5 pin sockets & 1 No.,16/20A Switch, wired together forming one point. The earth wire of green color only. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc. The job shall be complete & to the entire satisfaction of the Bank. The above includes supply & fixing modular cover plates, base plates, PVC box/ Gang box in brick wall by making necessary chase/ recess and making good the same. All switches sockets and accessories must be modular. All new points must be provided in concealed/ recessed conduit unless directed by architect / engineer in charge Interconnections to movable furniture, if any, shall be done using flexible PVC Conduit with end couplers.	Each	6	
10	AC point in PVC Conduit:- Supply & Installation of point wiring for Air Conditioner on workstations / table/ wall using 2X4 + 1x4 Sq.mm FR LSH ( Fire Resistant Low smoke Low Halogen) copper conductor PVC sheathed flexible wire pulled from distribution board through PVC Conduit pipe (HMS Grade) concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. Each point consisting of 1 nos of 20/25A, 3/5 pin sockets & 1 No. Single module 20/25A MCB, 1 Nos 25A Motor starter switch wired together forming one point. The earth wire of green color only. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc. The job shall be complete & to the entire satisfaction of the Bank. The above includes supply & fixing modular cover plates, base plates, PVC box/ Gang box in brick wall by making necessary chase/ recess and making good the same. All switches sockets and accessories must be modular. All new points must be provided in concealed/recessed conduit unless directed by architect / engineer in charge Interconnections to movable furniture, if any, shall be done using flexible PVC Conduit with end couplers.	Each	7	
11	Supply and laying 20 mm PVC conduit (MHS Grade) through wall / floor / above false ceiling / partition etc. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.	RM	30	
12	Supply and laying 25 mm PVC conduit (HMS Grade) through wall / floor / above false ceiling / partition etc. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting	RM	40	
13	3x6 sq mm submains wiring in PVC conduit:- Supply and laying of 2x6 sq mm + 1x6 sq mm FR LSH ( Fire Resistant Low smoke Low Halogen) stranded Cu. Wire in PVC Conduit (HMS Grade) through wall / floor / above false ceiling / partition etc. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.	RM	60	
14	Supply and laying of 3x10 submains wiring in PVC conduit Supply and laying of 2x10 sq mm + 1x10 sq mm FR ( Fire Resistant) stranded Cu. Wire in PVC Conduit (HMS Grade) through wall / floor / above false ceiling / partition etc. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.	RM	40	
15	Supply and laying of 4x10 flexible wire in PVC Conduit Supply and laying of 3x10 sq mm + 1x10 sq mm FR ( Fire Resistant) stranded Cu. Wire in PVC Conduit (HMS Grade) through wall / floor / above false ceiling / partition etc. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.	RM	15	

16	Supply installation testing and commissioning of 4 way SPN DB flush mounted on wall, sheet metal fabricated, powder coated, having dust-proof and vermin 'proof, gasketed and hinged door with all internals such as DIN rails, neutral link, interconnected wiring, complete with earthing legs, housing following switch gears(Double door HORIZONTAL DB) with 2 Nos 63A DP MCB for Single Phase UPS input and output isolation	Set	1	
17	SITC of 12 way SPN DB flush mounted on wall, sheet metal fabricated, powder coated, having dust-proof and vermin 'proof, gasketed and hinged door with all internals such as DIN rails, neutral link, interconnected wiring, complete with earthing legs, housing following switch gears(Double door HORIZONTAL DB ) i/c 1 Nos 63A DP MCB o/g 10 nos SP MCB (6-32A) 10 KA Breaking Capacity	Set	2	
18	SITC of 4 way Horizontal DB flush mounted on wall, sheet metal fabricated, powder coated, having dust- proof and vermin'proof, gasketed and hinged door with all internals such as DIN rails, neutral link, interconnected wiring, complete with earthing egs, housing following switch gears(Double door HORIZONTAL DB) with i/c 1 Nos 63A TPN MCB o/g 12 nos SP MCB (6-32A) 10 KA Breaking Capacity	Set	2	
19	SITC of 4 way VTPN MCCB DB flush mounted on wall, sheet metal fabricated, powder coated, having dust-proof and vermin 'proof, gasketed and hinged door with all internals such as DIN rails, neutral link, interconnected wiring, complete with earthing legs, housing following switch gears (Double door VerticalL DB) with i/c 1 Nos 63A TPN MCCB Thermal Magnetic Release Adjustable overload: 0.8-1.0 x In Adjustable Short Circuit: 6-10 x In o/g 12 nos SP MCB (6-32A) 10 KA Breaking Capacity	Set	1	
20	Construction: Free Standing with front access, Dust & vermin Proof, Form 3b construction.  Supply: 415V, 3Phase, 4 Wire, 50 Hz.  Control Supply: 230V Single Phase Fault Level: 36KA for 1 Sec Fabrication: CRCA Sheet 14SWG for Gland Plate, Load Bearing Structure and Body, 16 SWG for partitions, doors and panels.  25x3 mm neoprene gasket for door, cover and gland plate. 40x5 mm gasket for joints and canopy. DC Locks to be provided on doors, danger plates on front and rear of bus bar chambers, live parts.  Cable Entry / Exit: From top.  Name plate: COPPER Powder Coating: Pre treated with 7 tank process and duly powder coated.  TPN Busbars: 150A Rated copeer current density 1A/sq mm) with colour coded heat shrinkable sleeve. Neutral Bar of half size of Phase. Earth Bar of suitable size to be provided with earthing terminal on both ends Separate bus bar system to be provided for Emergency and Non Emergency supply outgoings Instrumentation: 1 Set 3 nos phase indicating lamps each backed up with MCB and switch shall be provided for each incomer. 1 no. VAF meter 0-200A with CT, selector switch, and fuse as reqd.  Main Incomer- 125A MCCB Change Over - 100A Manual Changeover Non Emergency Outgoing 2 Nos 63A MCCB, 2 Nos 63A FP MCB, 4 Nos 40A DP MCB One Section in outgoing section in both emergency and non emergency section be kept spare for future provisions	Set	1	
21	Supply and installation of MCCB enclosure along with 125 A 4 pole MCCB 36KA breaking capacity with thermal magnetic release, Adjustable overload: 0.8-1.0 x InAdjustable Short Circuit: 6-10 x In	Set	1	
22	S & I of earth pit comprising of 600mm x 600mmx 3mm. thick copper plate buried at a minimum depth of 2.7 meter including necessary materials like charcoal, salt etc as required conforming to BIS standards having brick masonary chamber with hinged cover and watering arrangement.	Set	2	
23	S & I of earth pit comprising of G.I. earth pipe 4.5 metre long, 40 mm dia including necessary materials like charcoal,salt etc as required conforming to BIS standards having brick masonary chamber with hinged cover and watering arrangement.	Set	0	
24	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required complete with insulation sleeve	RM	0	
25	Providing and fixing 25 mm X 5 mm GI strip on surface or in recess for connections etc. as required complete with insulation sleeve	RM	10	

26	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surfacel recessed conduit / submain wiring / cable as required.	RM	0	
	Providing and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing along with existing surface / recessed conduitl submain wiring / cable as required	RM	25	
28	Telephone point primary in PVC conduit:  Supply & fixing on wall/ furniture/ partition recessed type modular telephone socket outlet (RJ-11) with mounting box & front plate complete with chase cutting, mending good etc. as required complete including Supply & laying of 1 pair 0.5 mm dia. PVC insulated unarmoured telephone cables through PVC Conduit pipe (HMS) concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement drawn from telephone tag block. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface. The rate should include the cost of all materials, labour, T&P, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc. The job shall be complete & to the entire satisfaction of the Bank. The above includes supply & fixing modular cover plates, base plates, PVC box/ Gang box in brick wall by making necessary chase/ recess and making good the same. All switches sockets and accessories must be modular. All new points must be provided in concealed/recessed conduit unless directed by architect / engineer in charge Interconnections to movable furniture, if any, shall be done using flexible PVC Conduit with end	Each	6	
29	Providing, laying and connecting PVC insulated copper telephone cable of following sizes including termination in approved manner. 20-pair telephone cable.	RM	20	
	Providing and fixing of telephone tag block (Krone type) of 50 pair housed in GI box with cover of suitable size including termination	Each	1	
31	Supply and laying, effecting proper connec-tions, testing & commissioning of the following sizes of 1.1 KV armoured/ unarmoured XLPE insulated PVC sheathed aluminium /copper conductor cables conforming to IS: 7098 Part 1 with latest amendments laid over MS supports in existing RCC ducts/ laid in ground /laid on Cable Trays including clamping the cables to supports in an approved manner as required complete with all accessories. Supply and laying of 3x6 sq mm armoured aluminium cable in existing pipe / cable tray	RM	0	
32	Supply and laying, effecting proper connec-tions, testing & commissioning of the following sizes of 1.1 KV armoured/ unarmoured XLPE insulated PVC sheathed aluminium /copper conductor cables conforming to IS: 7098 Part 1 with latest amendments laid over MS supports in existing RCC ducts/ laid in ground /laid on Cable Trays including clamping the cables to supports in an approved manner as required complete with all accessories.  Supply and laying of 3.5x70 armoured aluminium cable in existing pipe / cable tray	RM	0	
	Supply and laying, effecting proper connec-tions, testing & commissioning of the following sizes of 1.1 KV armoured/ unarmoured XLPE insulated PVC sheathed aluminium /copper conductor cables conforming to IS: 7098 Part 1 with latest amendments laid over MS supports in existing RCC ducts/ laid in ground /laid on Cable Trays including clamping the cables to supports in an approved manner as required complete with all accessories. Supply and laying of 3.5x50 armoured aluminium cable in existing pipe / cable tray	RM	40	
34	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as reqd. End termination of 3.5x70 aluminium armoured cable	SET	0	
35	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as reqd. End termination of 3.5x50 aluminium armoured cable	SET	12	
	Supply, Installation, testing and commissioning of 2'X2' Recessed type LED LIGHT FITTINGS of 33-36 W with minimum lumen level of 3900 lumens, CRCA / Extruded aluminium housing, efficiency of 120 lumens per watt and & Average life not less than 50000 hrs. The light should be hanged/supported by MS chain from ceiling directly and not be kept directly on false ceiling frame. Cutting of ceiling, framing etc. be included in the costs. Standard warranty of light	Each	28	
37	Supply, Installation, testing and commissioning of LED DOWNLIGHT FITTINGS of 15-18 W with minimum lumen level of 1650 lumens with die cast aluminium, efficiency of 110 lumens per watt and & Average life not less than 30000 hrs. Cutting of ceiling, modifications required to the ceiling be included in the cost. Standard warranty of light fittings shall be minimum 2 years.	Each	50	
38	Supply Installation testing and commissioning of 4 ft, 18-20 watt LED batten with 2000 lumen output and 2 year warranty	Each	13	
39	Supply, Installation, Testing and commissioning of <b>100</b> % <b>metal body Wall mounted Fan,</b> 3/4 blade design, sweep 400-450 mm power input max 90 watt, Speed 1300-1330rpm with all accessories.	Each	12	
40	Ceiling Fan- Supply, Erecting,and testing of approved/specified make ceiling fans complete with down rod, canopy, blades and Electronic speed regulator 230-250 volts including connection with all necessary materials as required. Make- Usha/ Havells/Crompton	Each	3	

41	Supply & fixing of 230 mm exhaust fan <b>100% METAL body</b> with all accessories etc. complete of make As specified in tender document or approved by concerned office in charge.	Each	3		
42	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, 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 length, from the I/O hub to the point.		18		
43	Providing & fixing 9 U (Rack with glass door, opening in the front power panel 1 (horizontal), cable manager 1 lock & key) with switch.	Nos.	1		
44	Supply & fixing, Installation, Testing & Commissioning of 24 port Jack Panel.	Nos.	1		
45	Supplying and fixing Patch Cord-2 Meter- (DBPS Mounting Cord)	Nos.	12		
46	Supplying and fixing Patch Cord-1 Meter-	Nos.	12		
47	One call bell point with ceiling rose/ 6amp. 3 pin sockets controlled by one 6 amp. Push Modular switch. With call bell	Nos.	1		
48	Supplying, Installing Testing & Commissioning of LED Indicator (Red, Green & Yellow colour) for showing the Power ON/ Off position in Branch Light / Raw Power (1), AC (1), UPS OUT POWER SUPPLY (1). All indicators which needs to by off will be placed in one line and all indicator which needs to be off must be in other line. Marking of the Indicators to be done as per architect instructions.		1		
49	Supply, Installation, Testing & Commissioning of 4 watt per meter (300 lumen per meter) LED TUBULAR cove Light with high efficiency electronic driver. (Make Philips)	MR	45		
	GRAND TOTAL AMOUNT				
	GST Extra		, '	i !	1

## APPROVED MAKE LIST

4 Lighting Fixtures Philips/Wipro/Crompton 5 M.C.B./RCCB/RCBO etc Distribution Boards Same As Above  7 MCCB Schneider/Legrand/Havells 8 Change Over Switches 9 End Termination accessories 10 Telephone Cables & accessoreies 11 Fans/Exhaust fans 12 Music Speakers 13 Amplifiers 14 DVR 15 Rg11, CAT5/CAT6 cables/Telephone wires 16 CCTV Dome Camera 17 Hard Disk drive 18 Smoke/Heat/Optical Fire Detectors Philips/Bosch/Apolo O	S.N.	DESCRIPTION	Approved Makes
2       Wires & cables       R.R./Havells/ Polycab         3       Modular Switches, Sockets etc       Crabtree / Northwest /Legra         4       Lighting Fixtures       Philips/Wipro/Crompton         5       M.C.B./RCCB/RCBO etc       Legrand/Havells/ HAGER         6       Distribution Boards       Same As Above         7       MCCB       Schneider/Legrand/Havells         8       Change Over Switches       H.P.L./A.B.B./Standard/ L.&         9       End Termination accessories       H.P.L./A.B.B./Standard/ L.&         10       Telephone Cables & accessoreies       Havells, Krone, Finolex,         11       Fans/Exhaust fans       Crompton/Havell/USHA         12       Music Speakers       Philips/Bosch/Ahuja         13       Amplifiers       Philips/Bosch/Ahuja         14       DVR       Samsung.Honeywell ,         15       Rg11, CAT5/CAT6 cables/Telephone wires       Legrand, Molex, D'Link, Alv         16       CCTV Dome Camera       Honywell, HIKVision         17       Hard Disk drive       Seagate, HIKVISION         18       Smoke/Heat/Optical Fire Detectors       Edward, Siemens, Appolo O         19       Response Indicators, Hooters       Edward, Siemens OR other	S.N.	PVC Conduit	Precision/AKG /VIP
Modular Switches, Sockets etc Lighting Fixtures Philips/Wipro/Crompton M.C.B./RCCB/RCBO etc Distribution Boards MCCB RCHARD MCCB RCHARD	1	Ceiling Junction Boxes	Home lite/ANCHOR
4 Lighting Fixtures Philips/Wipro/Crompton 5 M.C.B./RCCB/RCBO etc Distribution Boards Same As Above  7 MCCB Schneider/Legrand/Havells 8 Change Over Switches 9 End Termination accessories Dowells/Usha/Brecco/Cosm 10 Telephone Cables & accessories Havells, Krone, Finolex, Wasic Speakers Philips/Bosch/Ahuja 13 Amplifiers Philips/Bosch/Ahuja 14 DVR Samsung,Honeywell, Rg11, CAT5/CAT6 cables/Telephone wires CCTV Dome Camera Honywell, HiKVision Rg11, CAT5/CAT6 cables/Telephone wires Edward,Siemens, Appolo O 19 Response Indicators, Hooters	2		R.R./Havells/ Polycab
5 M.C.B./RCCB/RCBO etc 6 Distribution Boards 5 Ame As Above 7 MCCB 8 Change Over Switches 9 End Termination accessories 10 Telephone Cables & accessories 11 Fans/Exhaust fans 12 Music Speakers 13 Amplifiers 14 DVR 15 Rg11, CAT5/CAT6 cables/Telephone wires 16 CCTV Dome Camera 17 Hard Disk drive 18 Somoke/Heat/Optical Fire Detectors 19 Response Indicators, Hooters 10 Elegrand/Havells/HAGER 11 Fans/Exhaust fans 12 Music Speakers 13 Amplifiers 14 DVR 15 Rg11, CAT5/CAT6 cables/Telephone wires 16 CCTV Dome Camera 17 Hard Disk drive 18 Somoke/Heat/Optical Fire Detectors 19 Response Indicators, Hooters	3	Modular Switches, Sockets etc	Crabtree / Northwest /Legrand
6 Distribution Boards 7 MCCB Schneider/Legrand/Havells 8 Change Over Switches 9 End Termination accessories 10 Telephone Cables & accessoreies 11 Fans/Exhaust fans 12 Music Speakers 13 Amplifiers 14 DVR 15 Rg11, CAT5/CAT6 cables/Telephone wires 16 CCTV Dome Camera 17 Hard Disk drive 18 Smoke/Heat/Optical Fire Detectors 19 Response Indicators, Hooters 10 Schneider/Legrand/Havells 11 Fans/Exhaust fans 12 Crompton/Havell/USHA 13 Amplifiers 14 DVR 15 Rg11, CAT5/CAT6 cables/Telephone wires 16 CCTV Dome Camera 17 Hard Disk drive 18 Smoke/Heat/Optical Fire Detectors 19 Response Indicators, Hooters	4	Lighting Fixtures	Philips/Wipro/Crompton
7 MCCB Schneider/Legrand/Havells 8 Change Over Switches 9 End Termination accessories 10 Telephone Cables & accessoreies 11 Fans/Exhaust fans 12 Music Speakers 13 Amplifiers 14 DVR 15 Rg11, CAT5/CAT6 cables/Telephone wires 16 CCTV Dome Camera 17 Hard Disk drive 18 Smoke/Heat/Optical Fire Detectors 19 Response Indicators, Hooters Schneider/Legrand/Havells 18 L.P.L./A.B.B./Standard/ L.& 19 Schneider/Legrand/Havells 19 L.P.L./A.B.B./Standard/ L.& 19 L.P.L./A.B.B./Standard/ L.& 10 L.P.L./A.B.B./Standard/ L.& 10 Dowells/Usha/Piecco/Cosm 10 Telephone Cables & accessoreies 10 Telephone Cables & accessoreies 11 Fans/Exhaust fans 12 Music Speakers 13 Amplifiers 14 DVR 15 Rg11, CAT5/CAT6 cables/Telephone wires 16 CCTV Dome Camera 17 Hard Disk drive 18 Smoke/Heat/Optical Fire Detectors 19 Response Indicators, Hooters	5	M.C.B./RCCB/RCBO etc	Legrand/Havells/ HAGER
8 Change Over Switches 9 End Termination accessories 10 Telephone Cables & accessoreies 11 Fans/Exhaust fans 12 Music Speakers 13 Amplifiers 14 DVR 15 Rg11, CAT5/CAT6 cables/Telephone wires 16 CCTV Dome Camera 17 Hard Disk drive 18 Smoke/Heat/Optical Fire Detectors 19 Response Indicators, Hooters 19 End Termination accessories 10 Dowells/Usha/Brecco/Cosm Havells, Krone, Finolex, Crompton/Havell/USHA Philips/Bosch/Ahuja Philips/Bosch/Ahuja Samsung,Honeywell , Legrand, Molex, D'Link ,AM Devell, HIKVision Seagate, HIKVISION Edward,Siemens, Appolo O	6	Distribution Boards	Same As Above
9 End Termination accessories  10 Telephone Cables & accessoreies  11 Fans/Exhaust fans  12 Music Speakers  13 Amplifiers  14 DVR  15 Rg11, CAT5/CAT6 cables/Telephone wires  16 CCTV Dome Camera  17 Hard Disk drive  18 Smoke/Heat/Optical Fire Detectors  19 Response Indicators, Hooters  Dowells/Usha/Brecco/Cosm Havells/Usha/Brecco/Cosm Havells/Usha/Brecco/Cosm Havells/Usha/Brecco/Cosm Havells/Usha/Brecco/Cosm Havells/Usha/Brecco/Cosm Havells/Usha/Brecco/Cosm Havells/Usha/Brecco/Cosm Havells/Usha/Brecco/Cosm Havells, Krone, Finolex, Crompton/Havell/Usha/Brecco/Cosm Philips/Bosch/Ahuja Samsung, Honeyell, Honeyell, HikVision Honeyell, HikVision Honeyell, HikVision Honeyell, HikVision Hard Disk drive  Seagate, HikViSiON Hard Disk drive  Seagate, HikViSiON Hard Disk drive Hard Disk drive Hard Disk drive Hard Disk drive Honeyell, HikVision Ho	7	MCCB	Schneider/Legrand/Havells
Telephone Cables & accessoreies  Havells, Krone, Finolex, Crompton/Havell/USHA  Drillips/Bosch/Ahuja  Amplifiers  Music Speakers  Amplifiers  Philips/Bosch/Ahuja  Philips/Bosch/Ahuja  Nore  Philips/Bosch/Ahuja  Philips/Bosch/Ahuja  Philips/Bosch/Ahuja  Samsung, Honeywell, Samsung, Honeywell, Samsung, Honeywell, CCTV Dome Camera  Honywell, HIKVision  Pagagate, HIKVISION  Seagate, HIKVISION  Response Indicators, Hooters  Havells, Krone, Finolex, Crompton/Havell/USHA  Philips/Bosch/Ahuja  Philips/Bosch/Ahuja  Samsung, Honeywell, Samsung, Honey	8	Change Over Switches	H.P.L./A.B.B./Standard/ L.& T.
11 Fans/Exhaust fans 12 Music Speakers 13 Amplifiers 14 DVR 15 Rg11, CAT5/CAT6 cables/Telephone wires 16 CCTV Dome Camera 17 Hard Disk drive 18 Smoke/Heat/Optical Fire Detectors 19 Response Indicators, Hooters  Crompton/Havell/USHA Philips/Bosch/Ahuja Philips/Bosch/Ahuja Samsung, Honeywell , Samsung, Molex, D'Link ,AM Honeywell , HikVision Seagate, HikVISION	9	End Termination accessories	Dowells/Usha/Brecco/Cosmos
12Music SpeakersPhilips/Bosch/Ahuja13AmplifiersPhilips/Bosch/Ahuja14DVRSamsung,Honeywell ,15Rg11, CAT5/CAT6 cables/Telephone wiresLegrand, Molex, D'Link ,AM16CCTV Dome CameraHonywell, HIKVision17Hard Disk driveSeagate, HIKVISION18Smoke/Heat/Optical Fire DetectorsEdward,Siemens, Appolo O19Response Indicators, HootersEdward,Siemens OR other	10	Telephone Cables & accessoreies	Havells, Krone, Finolex,
13Amplifiers14DVR15Rg11, CAT5/CAT6 cables/Telephone wiresLegrand, Molex, D'Link ,AM16CCTV Dome CameraHonywell, HIKVision17Hard Disk driveSeagate, HIKVISION18Smoke/Heat/Optical Fire DetectorsEdward,Siemens, Appolo O19Response Indicators, HootersEdward,Siemens OR other	11		
14DVRSamsung,Honeywell ,15Rg11, CAT5/CAT6 cables/Telephone wiresLegrand, Molex, D'Link ,AM16CCTV Dome CameraHonywell, HIKVision17Hard Disk driveSeagate, HIKVISION18Smoke/Heat/Optical Fire DetectorsEdward,Siemens, Appolo O19Response Indicators, HootersEdward,Siemens OR other	12		Philips/Bosch/Ahuja
15Rg11, CAT5/CAT6 cables/Telephone wiresLegrand, Molex, D'Link ,AM16CCTV Dome CameraHonywell, HIKVision17Hard Disk driveSeagate, HIKVISION18Smoke/Heat/Optical Fire DetectorsEdward, Siemens, Appolo O19Response Indicators, HootersEdward, Siemens OR other	13	Amplifiers	Philips/Bosch/Ahuja
16CCTV Dome CameraHonywell, HIKVision17Hard Disk driveSeagate, HIKVISION18Smoke/Heat/Optical Fire DetectorsEdward, Siemens, Appolo O19Response Indicators, HootersEdward, Siemens OR other	14	DVR	Samsung,Honeywell ,
17 Hard Disk drive  Seagate, HIKVISION  18 Smoke/Heat/Optical Fire Detectors  Edward, Siemens, Appolo O  19 Response Indicators, Hooters  Edward, Siemens OR other	15	Rg11, CAT5/CAT6 cables/Telephone wires	Legrand, Molex, D'Link ,AMP
18Smoke/Heat/Optical Fire DetectorsEdward, Siemens, Appolo O19Response Indicators, HootersEdward, Siemens OR other	16	CCTV Dome Camera	Honywell, HIKVision
19 Response Indicators, Hooters Edward, Siemens OR other	17	Hard Disk drive	Seagate, HIKVISION
	18		Edward,Siemens, Appolo Or
20 Telephone Tag Block Krone	19	Response Indicators, Hooters	Edward,Siemens OR other ISI
	20	Telephone Tag Block	Krone

Place:

Date:	Signature of contractor with seal

DETAILED SPECIFICATIONS FOR BILL OF QUANTITIES OF AC WORK OF ECCB OFFICE, FARIDABAD, HARYANA	
DESCRIPTION OF WORKS	roduct Model No
3.0 TR Ceiling Suspended Cassette Unit 3 Star Non- Inverter Model or equivalent	
2.0 TR Ceiling Suspended Cassette Unit 3 Star Non- Inverter Model or equivalent	
1.5 TR Ceiling Suspended Cassette Unit 3 Star Non- Inverter Model or Equivalent	
2.0 TR Wall mounted Split Unit 3 Star Inverter Model	
1.5 TR Wall mounted Split Unit 3 Star Inverter Model	
1 TR Wall mounted Split Unit 3 Star Inverter Model	
	DESCRIPTION OF WORKS  3.0 TR Ceiling Suspended Cassette Unit 3 Star Non- Inverter Model or equivalent  2.0 TR Ceiling Suspended Cassette Unit 3 Star Non- Inverter Model or equivalent  1.5 TR Ceiling Suspended Cassette Unit 3 Star Non- Inverter Model or Equivalent  2.0 TR Wall mounted Split Unit 3 Star Inverter Model  1.5 TR Wall mounted Split Unit 3 Star Inverter Model

**Note:** For any make, if OEM doesn't has specific star rating for the product but that product has equivalent energy saving as compared to the star rating, then vendor shall mentioned the same against the model number.

## **AIR-CONDITIONING WORKS:**

Air-conditioning System (3/4 Star - Wall mounted Split Unit/ Ceiling Suspended Cassette unit)

Equipment Make - Voltas/ Daikin/ Hitachi

Model – Cassette with copper condenser

Copper Pipe- RAJCO/ MANDEV/ TOTALINE

All the work of Drain pipe/copper pipe/cable shall be properly supported by clamps from the slab.

## AIR-CONDITIONING WORKS:

Sr.No	SPLIT TYPE AIR CONDITIONERS				
A.	PART -A				
	HIGH SIDE WORK				
	Description	Unit	Qnty	Rate	Amount
1	Supplying, erection, testing and commissioning following wall mounted Split/ Roof mounted cassette units of (Voltas/ Daikin/ Hitachi) with cordless remote complete with all necessary fittings duly insulated with 9 mm thick nitrile rubber pipe insulation with (evaporator coil – copper only), fan and fan motor, machine control panel improved Refrigerant Joints, .Air conditioners shall be fitted with hermetically sealed type suction cooled reciprocating or discharge cooled rotary compressor or scroll compressor. Compressor unit operating on R-22/ R-410. All complete as per drawing, approval and instructions of the Employer (Rates to be inclusive of Copper refrigerant pipe with insulation and Drain pipe up to 5 Mtr. length).				
а	1.0 TR wall mounted split unit (Minimum 3/4 Star rating Non- inverter type) including all necessary fittings and mountings as specified by the manufacturer.	Nos.	0		
b	1.5 TR wall mounted split unit (Minimum 3/4 Star rating Non- inverter type) including all necessary fittings and mountings as specified by the manufacturer.	Nos.	7		
С	2 TR wall mounted split unit (Minimum 3/4 Star rating Non- inverter type) including all necessary fittings and mountings as specified by the manufacturer.	Nos.	0		
d	1.5 TR Cassette type unit with 4 way/ round air flow including all necessary fittings and mountings as specified by the manufacturer. (3/4 star or Equivalent energy saving latest model Non- Inverter Type)	Nos.			
е	2.0 TR Cassette type unit with 4 way/ round air flow including all necessary fittings and mountings as specified by the manufacturer. (3/4 star or Equivalent energy saving latest model Non- Inverter Type)	Nos.			
f	3.0 TR Cassette type unit with 4 way/ round air flow including all necessary fittings and mountings as specified by the manufacturer . (3/4 star or Equivalent energy saving latest model Non- Inverter Type)				
	PART A				

В.	PART -B			
	LOW SIDE WORK			
1	EXTRA REFRIGERANT PIPING			
-				
	Supplying and laying of Extra copper refrigerant piping with nitrile rubber pipe insulation, both of size as specified by the			
	manufacturer suitable for 1.0 TR/ 1.5/2.0 TR Split type AC and 2.0/3.0 TR Cassette AC (From Indoor to outdoor Units) Beyond 3			
	M. Approved Meke- RAJCO/ MANDEV/ TOTALINE			
а	For 1.0 T Split unit	Mtr.	0	
b	For 1.5 T Split unit	Mtr.	110	
С	For 2.0 T Split Unit	Mtr.	0	
d	For 1.5 T Cassette Unit	Mtr.		
е	For 2.0 T Cassette Unit	Mtr.		
f	For 3.0 T Cassette Unit	Mtr.		
2	DRAIN PIPING			
	Providing and fixing drain piping up to drain as directed by the engineer in charge with all accessories e.g. elbows, unions,			
	sockets, reducers, reducing tees, nipples etc. Complete job including cutting chiseling in walls, fixing with GI clamps, floor and			
	making good of all chases/ cuts etc. and discharging the drain into a floor trap/ gully as per site conditions with insulation, both as			
	specified by the manufacturer. Approved make- Astal/ Ashirwad/ Prince.			
а	25 mm dia PVC drain pipe for Split AC	Mtr.	120	
b	32 mm dia PVC drain pipe for Cassette AC	Mtr.		
С	40mm dia PVC drain pipe for Cassette AC	Mtr		
3	AUTOMATIC VOLTAGE CONTROLLER			
	Providing and fixing of Stabilizer shall be Automatic version with copper coil transformer and the voltage selection range shall be			
	minimum depending on lowest peak recorded average in a month. Precise output voltage range (130V-170V to 240V -270 V).			
	Ensure the rating of Stabilizer shall be in accordance with max rated power of ACs considering instantaneous peak load			
	fluctuation.			
	Providing and fixing Stabilizer with 3-4 step relay and input voltage range of 130-270 V and output to be 230-240 V (Blue bird/			
	Oberoi Reputed Make) (copper winding).			
а	5 KVA (For 3.0/ 2.0 TR Split AC)	Nos.	0	
b	4 KVA (For 1.5/ 2.0 TR Split AC)	Nos.	0	
С	3 KVA (For 1.0/ 1.5 TR Split AC)	Nos.	7	
4	AIR-CONDITIONERS STAND WITH MS- CAGE			
	Providing and fixing of lockable caging for outdoor unit grouted on wall or on roof with open able shutter made of 10 X 10 mm MS			
	square bars placed vertically @ 5" c/c welded with 40 X 3 mm MS flat all- round. The frame shall be of angle 35mm*35mm and it			
1	shall be fixed to wall or roof with proper MS bracket to tackle the weight of outdoor unit. Item includes all necessary hardware,			
'	priming coat, synthetic enamel paint, hanger, clamps other accessories etc. All complete as per approval and instructions of the			
	employer. Size shall be adequate for AC outdoor size & sufficient space around the outdoor suitable for servicing purpose for			
	Outdoor unit.			

а	For 1.0 TR Hi Wall split units	Nos.	0		
b	For 1.5TR Hi Wall split units	Nos.	7		
С	For 2.0 TR Hi Wall split units	Nos.			
d	For 2.0 TR ceiling mounted cassette unit	Nos.	0		
е	For 3.0 TR ceiling mounted cassette unit	Nos.			
5	ELECTRICAL CABLES				
	Suitable IS/BIS standard Cable of 1.1-2.2 KV, Multi strand, FRLS 2- 4 C / 1.5/2.5 -6.0 Sqmm) as per design requirement of Peak load calculation of specific ACs system installed at site with 1"/1/2"/2" PVC conduit pipe between indoor/outdoor unit				
а	Supplying and laying of Extra Electrical interconnecting control cable from indoor to outdoor of size as specified by the manufacturer suitable for 1.0 TR/ 1.5/2.0 TR Split type AC. Approved Make- RR/ Polycab/ Havells	Mtr.	0		
b	Supplying and laying of Extra Electrical interconnecting control cable from indoor to outdoor of size as specified by the manufacturer suitable for 2.0/ 3.0 TR Cassette type AC. Approved Make- RR/ Polycab/ Havells	Mtr.	120		
6	TIMER				
а	Supplying, installation and commissioning of automatic 24 HRS. programmable TIMER of required capacity to run A.C. alternately (L&T/ Sumsung / Panasonic reputed make).	Nos.	0		
7	CORE CUTTING				
а	Core cutting member in Non RCC with civil works required at site including repairing & plastering etc.	Nos.	7		
	PART B				
				$\vdash$	
	GRAND TOTAL (PART A + PART B) EXCLUDING GST				

