TENDER BOQ

DILIP KULKARNI & ASSOCIATES -ARCHITECTS & INTERIOR DESINGER Address: 15/3, METRO HOUSE, "C" WING, II FLOOR, Opp. DELHI DARBAR HOTEL, COLABA CAUSWAY, MUMBAI - 400 039. E-Mail - dkulkarniasso@gmail.com / rajandk1956@gmail.com Mobile - Mr.Rajan - 98200 76349 / 97694 01774

NAME OF CLIENT: -	STATE BANK OF INDIA
ADDRESS: -	Sadar Bazar Branch, Ground Floor, 472, CMC Capital, Sadar Bazar,
	Dist. Satara - 415001.

NATURE OF WORK: -**AIR CONDITIONING WORK**

NO.	Particulars	QTY	UNIT	RATE	AMOUNT
Α	SUPPLY OF FOLLOWING EQUIPMENTS				
1.0	VARIABLE REFRIGERANT FLOW SYSTEM with Ozone friendly Gas				
	of Samsung / Daikin / Toshiba / Mitsubishi / Blue Star / Voltas Make.				
A01	Variable Refrigerant Flow modular type airconditioning system complete				
	with indoor and out door units with individual controller as per detail				
	given in specifications and having following items :				
	The vendor can select their configuration based on their product configuration and performance. However, the selection capacity of the outdoor unit should be				
	in line with the specification and concept briefed in the tender				
	document/drawing.				
	Modular type outdoor units equipped with highly efficient scroll				
	compressors, with all inverter constant speed type compressor(s), special acryl				
	precoated heat exchanger, low noise condenser fan, auto check function for				
	connection error, auto address and multi connection piping kits and any other				
	related items as per the manufacturers standards to be included in the quote. The quoted price shall be inclusive of full charge of refrigerant gas.				
1.1	VRV OUTDOOR UNITS				
	Supply of below mentioned capacity only				
1.1.1	20 HP	No.	1		
$\mathbf{\times}$	RATE IN WORDS -				
1.2	VRV INDOOR UNITS (IDU)				
	Indoor Units of Ductable / Cassette / Hi-wall type				
	Ceiling mounted Ductable, Cassette & Hi-wall type indoor units with , fan of				
	whisper quietness, compact cooling coil, electronic expansion valve, suction				
	air grill, drain pump,woven type filters etc.				
	All the valve packages to be included in the quotes Supply of below mentioned capacity WITH WIRELESS REMOTE				
121					
a	4Way Cassette units (Standard size 950x950) 3.2 TR (WAITING AREA)	Nos	4		
	RATE IN WORDS -	INUS	4		
		N	1		
b	2.5 TR (WORKSTATION AREA)	Nos	1		
\bowtie	<u>RATE IN WORDS -</u>			[]	
d	1.5 TR (MANAGER CABIN)	No.	1		
\geq	<u>RATE IN WORDS -</u>				
1.6	Supply of Refrigerant Joints for Indoor and Outdoor Units.	Lot	1		
\geq	<u>RATE IN WORDS -</u>				
	TOTAL (A)				
	GST WILL BE EXTRA @ 28 %				

2					
NO.	Particulars	QTY	UNIT	RATE	AMOUNT
В	INSTALLATION OF FOLLOWING EQUIPMENTS				
	Installation, charging and commissioning of the VRV / VRF systems with the				
	R-410 A refrigerant for the below stated machines as per the specs. This shall				
	include the nitrogen leak testing, oil charging,vaccumisation, MS base				
	platform for indoor/outdoor unit complete with epoxy painting, vibration				
	isolation pads, support hangars, railing, brackets, canvass connection with zip for ductable indoor units etc and other accessories as per the specs along with				
	lifting & shifting. The quoted price shall be inclusive of full charge of				
	additional refrigerant gas.				
1.1	VRV OUTDOOR UNITS				
1 1 1	Installation of below mentioned capacity only 20 HP	No	1		
	· · · · · · · · · · · · · · · · · · ·	No.	1		
\square	<u>RATE IN WORDS -</u>				
1.2	VRV INDOOR UNITS (IDU)				
	Indoor Units of Ductable / Cassette / Hi-wall type				
	Ceiling mounted Ductable, Cassette & Hi-wall type indoor units with , fan of whisper quietness, compact cooling coil, electronic expansion valve, suction				
	air grill, drain pump,woven type filters etc.				
	All the valve packages to be included in the quotes				
	Installation of below mentioned capacity				
*	4Way Cassette units (standard size 950x950)				
а	3.2 TR (WAITING AREA)	Nos	4		
\mathbf{X}	RATE IN WORDS -				
b	2.5 TR (WORKSTATION AREA)	Nos	1		
\mathbf{X}	<u>RATE IN WORDS -</u>				
d	1.5 TR (MANAGER CABIN)	No.	1		
$\mathbf{>}$	<u>RATE IN WORDS -</u>				
1.5	Installation & Testing of Refrigerant Joints for Indoor and Outdoor Units	Lot	0		
	RATE IN WORDS -				
$ \sim$					
2.0	Refrigerant Piping & Electrical works of VRV system				
2.1	COPPER Refrigerant Piping of make : Mandev / Nissan / Rajco				
	/Equivalent				
	Copper Ref.piping of the required sizes for all the units with refnets as per specs. The insulation shall be of 19mm thick Armaflex make through out the				
	running length of Ref. piping. The piping shall be well supported at specific				
	intervals with GI supports with insulated PUF saddles and installed on GI				
	cable trays supported from wall / roof with anchor fasteners & C type ms				
	angle.				
	The pipe sizes are tentitive, the vendors have to consider as per their				
	manufacturing standards.	Rmt	120		
\mid	<u>RATE IN WORDS -</u>		r	1	
2.2	Control Wiring of make : Polycab / CCI / Equivalent				
_	Control cabling from Indoor to outdoor unit for all the units with the necessary				
	The cabling shall be FRLS weather proof type as most of the cabling will have				
	open exposure to atmosphere. The cabling shall be bundled properly and shall				
	be neatly aligned with the Refrigerant piping.				
1			1		

NO.	Particulars	QTY	UNIT	RATE	AMOUNT
		QII	UIII		AMOUNT
	The cabling shall be well supported at specific intervals and & similar to				
	refrigerant piping.				
	(2 core x 0.75 Sq mm cu.cable)	Rmt	100		
$\overline{\checkmark}$	RATE IN WORDS -			łł.	
\sim					
2.3	Power Cabling for VRV Indoor units of make : Polycab / CCI /Equivalent				
	FRLS Power cabling with earthing for indoor units from power point provided within 2mtrs. of unit				
	(3 Core x 2.5 sqmm)	Rmt	90		
\checkmark	RATE IN WORDS -			11	
	(2 Core x 1.5 sqmm)	Rmt	135		
$\overline{}$		Kiiit	155		
$\overline{}$	<u>RATE IN WORDS -</u>				
2.4	Power Cabling for VRV Outdoor units of make : Polycab / CCI /Equivalent				
	Power cabling with earthing from MCB to outdoor unit by means of GI cable				
	trays of the required gauge as the cabling will have open exposure to				
	atmosphere. The cabling shall be well supported at specific intervals with GI				
	cable tray & angles frame work and screwed to wall with anchor fasteners. (
	2mtr each unit)				
	(4 Core x 16 sqmm)	Rmt	10		
$\overline{\langle}$	RATE IN WORDS -			L	
2.5	Drain Piping for Packaged units Make : Supreme / Prince				
	Drain Piping shall be Hard PVC.25mm dia for single unit, 40mm dia for two				
	units and 50mm dia for 3 units. Drain Piping shall be insulated with 12mm				
	Armaflex.	Rmt	120		
\prec	<u>RATE IN WORDS -</u>				
	TOTAL (B)				
	GST WILL BE EXTRA @ 18 %				
C	GST WILL BE EXTRA @ 18 %				
C	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK)				
C 1	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall				
	GST WILL BE EXTRA @ 18 % <u>Supplying Of DX Machines (HIGH SIDE WORK)</u> Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils,				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc.,				
	GST WILL BE EXTRA @ 18 % <u>Supplying Of DX Machines (HIGH SIDE WORK)</u> Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit Comprising of Tube and Finned Type Condenser Coil Scroll /				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit Comprising of Tube and Finned Type Condenser Coil Scroll / Reciprocating / Rotary Compressor, Expansion device Propeller / Axial				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit Comprising of Tube and Finned Type Condenser Coil Scroll / Reciprocating / Rotary Compressor, Expansion device Propeller / Axial Fans, Interconnected refrigerant piping with insulation etc., first charge				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit Comprising of Tube and Finned Type Condenser Coil Scroll / Reciprocating / Rotary Compressor, Expansion device Propeller / Axial Fans, Interconnected refrigerant piping with insulation etc., first charge of refrigerant Gas and Oil.				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit Comprising of Tube and Finned Type Condenser Coil Scroll / Reciprocating / Rotary Compressor, Expansion device Propeller / Axial Fans, Interconnected refrigerant piping with insulation etc., first charge of refrigerant Gas and Oil. 4 Rmt. Interconnected refrigerant piping of copper duly insulated with				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit Comprising of Tube and Finned Type Condenser Coil Scroll / Reciprocating / Rotary Compressor, Expansion device Propeller / Axial Fans, Interconnected refrigerant piping with insulation etc., first charge of refrigerant Gas and Oil. 4 Rmt. Interconnected refrigerant piping of copper duly insulated with EXPANDED POLYTHENE SECTIONS, in open or concaled through				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit Comprising of Tube and Finned Type Condenser Coil Scroll / Reciprocating / Rotary Compressor, Expansion device Propeller / Axial Fans, Interconnected refrigerant piping with insulation etc., first charge of refrigerant Gas and Oil. 4 Rmt. Interconnected refrigerant piping of copper duly insulated with EXPANDED POLYTHENE SECTIONS, in open or concaled through the wall/ partitions or ceiling as per the requirement and instructions of				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit Comprising of Tube and Finned Type Condenser Coil Scroll / Reciprocating / Rotary Compressor, Expansion device Propeller / Axial Fans, Interconnected refrigerant piping with insulation etc., first charge of refrigerant Gas and Oil. 4 Rmt. Interconnected refrigerant piping of copper duly insulated with EXPANDED POLYTHENE SECTIONS, in open or concaled through the wall/ partitions or ceiling as per the requirement and instructions of Architect/ Consultant.				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit Comprising of Tube and Finned Type Condenser Coil Scroll / Reciprocating / Rotary Compressor, Expansion device Propeller / Axial Fans, Interconnected refrigerant piping with insulation etc., first charge of refrigerant Gas and Oil. 4 Rmt. Interconnected refrigerant piping of copper duly insulated with EXPANDED POLYTHENE SECTIONS, in open or concaled through the wall/ partitions or ceiling as per the requirement and instructions of Architect/ Consultant. Interconnected Electrical Power & Control wiring of Copper ISI as				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit Comprising of Tube and Finned Type Condenser Coil Scroll / Reciprocating / Rotary Compressor, Expansion device Propeller / Axial Fans, Interconnected refrigerant piping with insulation etc., first charge of refrigerant Gas and Oil. 4 Rmt. Interconnected refrigerant piping of copper duly insulated with EXPANDED POLYTHENE SECTIONS, in open or concaled through the wall/ partitions or ceiling as per the requirement and instructions of Architect/ Consultant. Interconnected Electrical Power & Control wiring of Copper ISI as required from indoor and outdoor units. A PVC conduit is recommended,				
	GST WILL BE EXTRA @ 18 % Supplying Of DX Machines (HIGH SIDE WORK) Supply, Installation, Testing & Commissioning of Cassette/ High Wall Split Units Complete with following Specifications/ Components Indoor Powder coated evaporating unit comprising of DX cooling coils, Blower with Electric Motor insulated sandwiched Drain Tray Junction Box for Electrical connections 20 micron HDPE washable Fitters etc., with IR Remote Control Unit Outdoor powder coated Condensing Unit Comprising of Tube and Finned Type Condenser Coil Scroll / Reciprocating / Rotary Compressor, Expansion device Propeller / Axial Fans, Interconnected refrigerant piping with insulation etc., first charge of refrigerant Gas and Oil. 4 Rmt. Interconnected refrigerant piping of copper duly insulated with EXPANDED POLYTHENE SECTIONS, in open or concaled through the wall/ partitions or ceiling as per the requirement and instructions of Architect/ Consultant. Interconnected Electrical Power & Control wiring of Copper ISI as				

4					
NO.	Particulars	QTY	UNIT	RATE	AMOUNT
1.1	phase power ARM cable is provided inside Outdoor Unit of Cassette Unit. The Indoor A.C Unit should have two digit 7-Seg. LED/LCD display set temperature 1.5-TR High Wall Split Unit GE rating of THREE STAR and above (E- Lobby)	2	SETS		
\times	RATE IN WORDS -				
1.2	1.0-TR High Wall Split Unit GE rating of THREE STAR and above(Server & UPS Room) RATE IN WORDS -	2	SETS		
	TOTAL OF SECTION-C				
	GST WILL BE EXTRA @ 28 %				
D	LOW SIDE WORK				
1:3	Providing & Fixing additional (Beyond 4 Meters) refrigerant soft copper suction & liquid piping with nitrile pipe insulation with electrical cabling	50	MTRS		
\ge	<u>RATE IN WORDS -</u>		T		
1:4	Providing, Installing & Communication approved make 4 Core X 2.5 Sq.mm. Cable between Outdoor Unit & Indoor Unit, O.D.U. to I.D.U	50	MTRS		
\succ	<u>RATE IN WORDS -</u>				
1:5	Providing & Installing 25mm PVC Drain Piping of Prince or Suprime make	40	MTRS		
\bowtie	<u>RATE IN WORDS -</u>		1		
1:6	S.I.T.C. of L shape / suitable shape M.S. Frame work for stand and Catwalk for mounting Outdoor Units on wall / On floor with all fixing necessary hardware and M.S. framework for outdoor units of split AC.	4	Nos		
\bowtie	<u>RATE IN WORDS -</u>				
	TOTAL OF SECTION-D				
	GST WILL BE EXTRA @ 18 %				
	GRAND TOTAL				