

## STATE BANK OF INDIA

## ESTIMATE –AIR CONDITIONING WORKS OF BIDAR 1972 BRANCH

Sl No.	Equipment discription/ Particulars	Unit	Quantity	Rate	Amount
1.a	Supply of minimum <b>4.0 TR capacity. Ceiling mounted-</b>	Nos	3		
1.b	Installation testing and commissioning of above above item	Nos	3		
1.c	Hard / Soft drawn Refrigerant piping circuit with 13mm thick	m	35		
1.d	Installation testing and commissioning of above above item	m	35		
1.e	Necessary electrical copper wiring including earthing	m	45		
1.f	Installation testing and commissioning of above above item	m	45		
2.a	Supply of minimum <b>3.0 TR capacity, Ceiling mounted-Cassette-split</b> air conditioners INVERTER-type with all modern facilities , first fill of refrigerant complete as under: <b>Indoor unit:</b> Ceiling mount comprising cooling coil, evaporator fan with motor, filters, insulated drain pan, drain pump, expansion valve, refrigerant filter drier with codeless remote control unit, etc: with Temperature indication. <b>Outdoor unit:</b> comprising inverter type hermetically sealed scroll/Rotary compressors, condenser coil with fan & motor, starters / controls / cutouts / relays etc., mounted inside a powder coated sheet metal cabinet of 2mm thick, duly treated for corrosion protection complete, mounted on ribbed rubber pads. The condenser & vaporizer should be <b>Copper only</b> . Capacity: <b>10.55kW(+5%)</b> cooling capacity, 3-Phase Inverter AC , LATEST BEE STAR RATING: N/A	Nos	0		
2.b	Installation testing and commissioning of above above item	Nos	0		
2.c	Hard / Soft drawn Refrigerant piping circuit with 13mm thick nitrile rubber insulation. One refrigerant pipe circuit shall be inclusive of Suction gas & Liquid refrigerant pipe, interconnecting indoor and outdoor units (both suction and discharge lines	m	0		
2.d	Installation testing and commissioning of above above item	m	0		
2.e	Necessary electrical copper wiring including earthing conductor in rigid PVC conduit. Electrical Power & control cable between the indoor and outdoor unit with armored copper cable of suitable size along with the copper pipe routing.	m	0		
2.f	Installation testing and commissioning of above above item	m	0		
3.a	Supply of minimum <b>2.0 TR capacity. Ceiling mounted-</b>	Nos	0		
3.b	Installation testing and commissioning of above above item	Nos	0		
3.c	Hard / Soft drawn Refrigerant piping circuit with 13mm thick	m	0		
3.d	Installation testing and commissioning of above above item	m	0		
3.e	Necessary electrical copper wiring including earthing	m	0		
3.f	Installation testing and commissioning of above above item	m	0		

4.a	Supply of minimum <b>1.5 TR capacity, Ceiling mounted-Cassette-split</b> air conditioners INVERTER-type with all modern facilities , first fill of refrigerant complete as under: <b>Indoor unit:</b> Ceiling mount comprising cooling coil, evaporator fan with motor, filters, insulated drain pan, drain pump, expansion valve, refrigerant filter drier with codeless remote control unit, etc: with Temperature indication. <b>Outdoor unit:</b> comprising inverter type hermetically sealed scroll/Rotary compressors, condenser coil with fan & motor, starters / controls / cutouts / relays etc., mounted inside a powder coated sheet metal cabinet of 2mm thick, duly treated for corrosion protection complete, mounted on ribbed rubber pads. The condenser & vaporizer should be <b>Copper only</b> . <u>Capacity : 5.27kW(+5%)</u> cooling capacity, 1-Phase Inverter AC , LATEST BEE STAR RATING: <b>3star</b> and above	Nos	3		
4.b	Installation testing and commissioning of above above item	Nos	3		
4.c	Hard / Soft drawn Refrigerant piping circuit with 13mm thick nitrile rubber insulation. One refrigerant pipe circuit shall be inclusive of Suction gas & Liquid refrigerant pipe, interconnecting indoor and outdoor units (both suction and discharge lines	m	40		
4.d	Installation testing and commissioning of above above item	m	40		
4.e	Necessary electrical copper wiring including earthing conductor in rigid PVC conduit. Electrical Power & control cable between the indoor and outdoor unit with armored copper cable of suitable size along with the copper pipe	m	50		
4.f	Installation testing and commissioning of above above item	m	50		
5.a	<del>Supply of minimum <b>2.0Tr capacity, Hi-wall mounted Split</b></del>	<del>Nos</del>	<del>0</del>		
5.b	<del>Installation testing and commissioning of above above item</del>	<del>Nos</del>	<del>0</del>		
5.c	<del>Hard / Soft drawn Refrigerant pining circuit with 13mm thick</del>	<del>m</del>	<del>0</del>		
5.d	<del>Installation testing and commissioning of above above item</del>	<del>m</del>	<del>0</del>		
5.e	<del>Necessary electrical copper wiring including earthing</del>	<del>m</del>	<del>0</del>		
5.f	<del>Installation testing and commissioning of above above item</del>	<del>m</del>	<del>0</del>		
6.a	Supply of minimum <b>1.5Tr capacity, Hi-wall</b> mounted Split Air Conditioners-INVERTER-type including set of copper piping,drain piping & electrical wiring up to 3meters between indoor and outdoor units and first fill of refrigerant. <b>Indoor unit:</b> HI-Wall Mount comprising - cooling coil, evaporator fan with motor, filters, insulated drain pan, expansion valve/venturi, refrigerant filter drier with codeless remote control unit, etc. <b>Outdoor unit:</b> comprising Single phase hermetically sealed Compressor, condenser coil with fan & motor / controls / cutouts / relays etc., mounted inside a powder coated sheet metal cabinet of 2mm thick, duly treated for corrosion protection in complete, mounted on ribbed rubber pads. The condenser & vaporizer should	Nos	0		

6.b	Installation testing and commissioning of above above item	Nos	0		
6.c	Hard / Soft drawn Refrigerant piping circuit with 13mm thick nitrile rubber insulation. One refrigerant pipe circuit shall be inclusive of Suction gas & Liquid refrigerant pipe, interconnecting indoor and outdoor units (both suction and discharge lines	m	0		
6.d	Installation testing and commissioning of above above item	m	0		
6.e	Necessary electrical copper wiring including earthing conductor in rigid PVC conduit. Electrical Power & control cable between the indoor and outdoor unit with armored copper cable of suitable size along with the copper pipe routing.	m	0		
6.f	Installation testing and commissioning of above above item	m	0		
7.a	Supply of minimum <b>1.0Tr capacity, Hi-wall</b> mounted Split Air Conditioners-INVERTER-type including set of copper piping,drain piping & electrical wiring up to 3meters between indoor and outdoor units and first fill of refrigerant. <b>Indoor unit:</b> HI-Wall Mount comprising - cooling coil, evaporator fan with motor, filters, insulated drain pan, expansion valve/venturi, refrigerant filter drier with codeless remote control unit, etc. <b>Outdoor unit:</b> comprising Single phase hermetically sealed Compressor, condenser coil with fan & motor / controls / cutouts / relays etc., mounted inside a powder coated sheet metal cabinet of 2mm thick, duly treated for corrosion protection in complete, mounted on ribbed rubber pads. The condenser & vaporizer should be <del>Copper only</del> . Capacity: <del>2.51kW (+ 5%)</del> cooling capacity 1	Nos	2		
7.b	Installation testing and commissioning of above above item	Nos	2		
7.c	Hard / Soft drawn Refrigerant piping circuit with 13mm thick nitrile rubber insulation. One refrigerant pipe circuit shall be inclusive of Suction gas & Liquid refrigerant pipe, interconnecting indoor and outdoor units (both suction and discharge lines	m	30		
7.d	Installation testing and commissioning of above above item	m	30		
7.e	Necessary electrical copper wiring including earthing conductor in rigid PVC conduit. Electrical Power & control cable between the indoor and outdoor unit with armored copper cable of suitable size along with the copper pipe routing.	m	33		
7.f	Installation testing and commissioning of above above item	m	33		
8	Supply and installation of Air curtain of 2m width(door opening 1.8m), operating height 2.75m	Nos	1		

9	Supply, Installation, testing and commissioning of 4KVA Voltage Stabilizer suitable for the Air conditioners intelligent time delay (for 2.0Tr /1.5Tr AC)	Nos	0		
10	Supply, Installation, testing and commissioning of 3KVA Voltage Stabilizer suitable for the Air conditioners intelligent time delay (for 1.0Tr AC)	Nos	2		
11	Supply and erection of 20cm wide pre fabricated painted GI	m	0		
	0	sqm			
12	SUPPLY and installation of timer switch for AC in Server	Nos	0		
13	Supply and installation of Drain piping using rigid CPVC pipe 25mm	m	60		
14	Supply installation testing and commissioning of Drain pump with UPVC Construction, with sufficient water holding capacity with float valve, automatic controller etc as required	Nos	2		
15	Supply Factory made/fabricated Heavy Metallic Wall mounting supports for the condenser of 4Tr &3Tr Cassette AC ODUs	Nos	6		
16	Supply Factory made Metallic Wall mounting supports for the condenser of Split Air Conditioners - Hi Wall.	Nos	2		
17	S,I,T &C Acoustically insulated mixed flow inline Fresh air fan with accessories for FA distribution to cassette units ~200cfm 10MM STATIC - (154mm dia coaxial fan) in Alluminium powder coated fresh packahe unit with filter/grills. ( filter should be removable type for cleaning and maintenance )	Nos	1		
18	S,I,T & C PVC pipe for frech air distribution with necessary fittings and supports reducers, 'Y'joints, 'T's etc.				
a.	225dia	Rm	0		
b.	163dia	Rm	3		
c.	110dia	Rm	30		
d.	75dia	Rm	8		
19	S,I,T & C flexible connections to Highwall units/ Fresh air with disc valve and accessories including flexible duct	Nos	5		
20	Core cutting through concrete slab, beams, lintels, brick or block masonry up to 120mm depth.				
a.	Up to 50mm Dia	Nos	1		
b.	500mm to 100mm dia	Nos	1		
c.	100mm to 150mm dia	Nos	1		
Total (excluding GST)					