

4741-43494-Air Conditioners with Installation and Allied Material for CUI-Lahore Campus				
Detail of ACs in each category				
Sr. #	Description of Items / Work	Unit	Qty	
1	<u>1 Ton T3 Air Conditioner Haier, Orient, Pel, Gree or Equivalent.</u> Supply, Installation, Testing, and Commissioning of 1 Ton Inverter Split Air Conditioner (Heat & Cool), wall-mounted type, having minimum 12,000 BTU cooling capacity. The unit must be equipped with a high-efficiency inverter compressor (Mitsubishi, GMCC, or equivalent), utilizing eco-friendly.R-32, R-410A refrigerant with 100% pure copper piping and premium insulation. The system must operate smoothly on a standard 220–240V / 50Hz power supply, featuring low-voltage startup capability and advanced energy-saving technology. Manufacturer Warranty Requirements: Complete Unit / Functional Parts: Minimum 3-Year comprehensive warranty. Inverter Compressor: Minimum 08 to 12 Years replacement warranty. PCB Kit / Electronic Circuit: Minimum 4 to 5 Years replacement warranty. Gas Leakage & Refilling: Minimum 3 to 5 Years coverage (including Evaporator and Condenser coils).The vendor must provide an official, valid manufacturer warranty card and certificate at the time of delivery <u>Installation of 1 Ton Air Conditioner,</u> MS Bracket for Outdoor 4.6mm thickness and paint on frame, unit with 3/4" dia PVC pipe (popular or equivalent) for drainage, Control wire flexible from indoor to outdoor as per required load, refrigerant copper pipe guage 22, 60mm x 60mm PVC duct (Adamjee or Equivalent) to cover insulated metal tubing between in-door and out-door units and PVC drainage pipe; including the cost of carriage to site and fixing in position; lacquer spray on refrigerant copper pipe, all installation make with screws, complete in all respects and to the entire satisfaction of the engineer in charge.Note: 10 Rft refringent pipe including wire, drain pipe and PVC Duct will be provided with installation kit. Additional Refrigerant, Drain Pipe, Control wire and PVC Duct used if any will be separately charged.	Nos	16	
2	<u>1.5 Ton T3 Air Conditioner Supply Haier, Orient, Pel, Gree or Equivalent.</u> Installation, Testing, and Commissioning of 1.5 Ton Inverter Split Air Conditioner (Heat & Cool), wall-mounted type, having minimum 18,000 BTU cooling capacity. The unit must be equipped with a high-efficiency inverter compressor (Mitsubishi, GMCC, or equivalent), utilizing eco-friendly.R-32, R-410A refrigerant with 100% pure copper piping and premium insulation. The system must operate smoothly on a standard 220–240V / 50Hz power supply, featuring low-voltage startup capability and advanced energy-saving technology. Manufacturer Warranty Requirements: Complete Unit / Functional Parts: Minimum 3-Year comprehensive warranty. Inverter Compressor: Minimum 08 to 12 Years replacement warranty. PCB Kit / Electronic Circuit: Minimum 4 to 5 Years replacement warranty. Gas Leakage & Refilling: Minimum 3 to 5 Years coverage (including Evaporator and Condenser coils).The vendor must provide an official, valid manufacturer warranty card and certificate at the time of delivery <u>Installation of 1.5 Ton T3 Air Conditioner,</u> MS Bracket for Outdoor 4.6mm thickness and paint on frame, unit with 3/4" dia PVC pipe (popular or equivalent) for drainage, Control wire flexible from indoor to outdoor as per required load, refrigerant copper pipe guage 22, 60mm x 60mm PVC duct (Adamjee or Equivalent) to cover insulated metal tubing between in-door and out-door units and PVC drainage pipe; including the cost of carriage to site and fixing in position; lacquer spray on refrigerant copper pipe, all installation make with screws, complete in all respects and to the entire satisfaction of the engineer in charge. Note: 10 Rft refringent pipe including wire, drain pipe and PVC Duct will be provided with installation kit. Additional Refrigerant, Drain Pipe, Control wire and PVC Duct used if any will be separately charged.	Nos	31	

3	<u>2 Ton T3 Air Conditioner Haier, Orient, Pel, Gree or Equivalent.</u> Supply, Installation, Testing, and Commissioning of 2 Ton Inverter Split Air Conditioner (Heat & Cool), wall-mounted type, having minimum 24,000 BTU cooling capacity. The unit must be equipped with a high-efficiency inverter compressor (Mitsubishi, GMCC, or equivalent), utilizing eco-friendly.R-32, R-410A refrigerant with 100% pure copper piping and premium insulation. The system must operate smoothly on a standard 220–240V / 50Hz power supply, featuring low-voltage startup capability and advanced energy-saving technology. Manufacturer Warranty Requirements: Complete Unit / Functional Parts: Minimum 3-Year comprehensive warranty. Inverter Compressor: Minimum 08 to 12 Years replacement warranty. PCB Kit / Electronic Circuit: Minimum 4 to 5 Years replacement warranty. Gas Leakage & Refilling: Minimum 3 to 5 Years coverage (including Evaporator and Condenser coils).The vendor must provide an official, valid manufacturer warranty card and certificate at the time of delivery <u>Installation of 2 Ton T3 Air Conditioner.</u> MS Bracket for Outdoor 4.6mm thickness and paint on frame, unit with 3/4" dia PVC pipe (popular or equivalent) for drainage, Control wire flexible from indoor to outdoor as per required load, refrigerant copper pipe guage 22, 60mm x 60mm PVC duct (Adamjee or Equivalent) to cover insulated metal tubing between in-door and out-door units and PVC drainage pipe; including the cost of carriage to site and fixing in position; lacquer spray on refrigerant copper pipe, all installation make with screws, complete in all respects and to the entire satisfaction of the engineer in charge. Note: 10 Rft refringent pipe including wire, drain pipe and PVC Duct will be provided with installation kit. Additional Refrigerant, Drain Pipe, Control wire and PVC Duct used if any will be separately charged.	Nos	31	
4	<u>2 Ton Air Conditioner (Floor standing) Haier, Orient, Pel, Dawlance, Waves or Equivalent</u> Supply, Installation, Testing, and Commissioning of 2 Ton Inverter Split Air Conditioner (Cool), floor standing type, having minimum 24,000 BTU cooling capacity. The unit must be equipped with a high-efficiency inverter compressor (Mitsubishi, GMCC, or equivalent), utilizing eco-friendly.R-32, R-410A refrigerant with 100% pure copper piping and premium insulation. The system must operate smoothly on a standard 220–240V / 50Hz power supply, featuring low-voltage startup capability and advanced energy-saving technology. Manufacturer Warranty Requirements: Complete Unit / Functional Parts: Minimum 3-Year comprehensive warranty. Inverter Compressor: Minimum 08 to 12 Years replacement warranty. PCB Kit / Electronic Circuit: Minimum 4 to 5 Years replacement warranty. Gas Leakage & Refilling: Minimum 3 to 5 Years coverage (including Evaporator and Condenser coils).The vendor must provide an official, valid manufacturer warranty card and certificate at the time of delivery <u>Installation of 2 Ton Air Conditioners</u> ,MS Bracket for Indoor Outdoor 4.6mm thickness and paint on frame, unit with 3/4" dia PVC pipe (popular or equivalent) for drainage, Control wire flexible from indoor to outdoor as per required load, refrigerant copper pipe guage 22, 60mm x 60mm PVC duct (Adamjee or Equivalent) to cover insulated metal tubing between in-door and out-door units and PVC drainage pipe; including the cost of carriage to site and fixing in position; lacquer spray on refrigerant copper pipe, all installation make with screws, complete in all respects and to the entire satisfaction of the engineer in charge.Note: 10 Rft refringent pipe including wire, drain pipe and PVC Duct will be provided with installation kit. Additional Refrigerant, Drain Pipe, Control wire and PVC Duct used if any will be separately charged.	Nos	4	

5	4 Ton Air Conditioner Haier, Orient, Pel, Dawlance, Waves or Equivalent Supply, Installation, Testing, and Commissioning of 4 Ton Inverter Split Air Conditioner (Cool), floor standing type, having minimum 48,000 BTU cooling capacity. The unit must be equipped with a high-efficiency inverter compressor (Mitsubishi, GMCC, or equivalent), utilizing eco-friendly R-32, R-410A refrigerant with 100% pure copper piping and premium insulation. The system must operate smoothly on a standard 220–240V / 50Hz power supply, featuring low-voltage startup capability and advanced energy-saving technology. Manufacturer Warranty Requirements: Complete Unit / Functional Parts: Minimum 3-Year comprehensive warranty. Inverter Compressor: Minimum 08 to 12 Years replacement warranty. PCB Kit / Electronic Circuit: Minimum 4 to 5 Years replacement warranty. Gas Leakage & Refilling: Minimum 3 to 5 Years coverage (including Evaporator and Condenser coils). The vendor must provide an official, valid manufacturer warranty card and certificate at the time of delivery. Installation of 4 Ton Air Conditioners MS Bracket for Indoor Outdoor 4.6mm thickness and paint on frame, unit with 3/4" dia PVC pipe (popular or equivalent) for drainage, Control wire flexible from indoor to outdoor as per required load, refrigerant copper pipe gauge 22, 60mm x 60mm PVC duct (Adamjee or Equivalent) to cover insulated metal tubing between in-door and out-door units and PVC drainage pipe; including the cost of carriage to site and fixing in position; lacquer spray on refrigerant copper pipe, all installation make with screws, complete in all respects and to the entire satisfaction of the engineer in charge. Note: 10 Rft refringent pipe including wire, drain pipe and PVC Duct will be provided with installation kit. Additional Refrigerant, Drain Pipe, Control wire and PVC Duct used if any will be separately charged.	Nos	3	
6	Cable 10mm 4 Core copper conductor PVC Insulated PVC Sheathed. Full guage and insulation under specification BS EN 60228, BS 6346 GM or equivalent	Meter	50	
7	Cable 7/0.36 2 Core copper conductor PVC Insulated PVC Sheathed. Full guage and insulation under specification BS EN 60228, BS 6346 GM or equivalent	Coil / roll	2	
Unit Rates to be metined here on company letterhead for the additional installation material (as per requirement of site for respective category of Acs)				
	1 Ton inverter	Unit	Est. add. RFT	Unit Cost per RFT (PKR)
8	Refrigrent Copper Pipe 1 Ton inverter (if extra from 10 Feet) 22 Guage Muller or equivalent	RFT	100	
	Electric flexible control wire (if extra from 10 Feet) GM or equivalent	RFT	100	
	Drain Pipe 3/4" dia PVC (if extra from 10 feet) Popular or equivalent	RFT	50	
	PVC Duct 60mm x 60mm (if extra from 10 feet) Adamjee or equivalent	RFT	50	
	1.5 Ton inverter			
9	Refrigrent Copper Pipe 1.5 Ton inverter (if extra from 10 Feet) 22 Guage Muller or equivalent	RFT	180	
	Electric flexible control wire (if extra from 10 Feet) GM or equivalent	RFT	180	
	Drain Pipe 3/4" dia PVC (if extra from 10 feet) Popular or equivalent	RFT	100	
	PVC Duct 60mm x 60mm (if extra from 10 feet) Adamjee or equivalent	RFT	100	
	2 Ton Inverte			
10	Refrigrent Copper Pipe 2 Ton Inverter (if extra from 10 Feet) 22 Guage Muller or equivalent	RFT	150	
	Electric flexible control wire (if extra from 10 Feet) GM or equivalent	RFT	150	
	Drain Pipe 3/4" dia PVC (if extra from 10 feet) Popular or equivalent	RFT	100	
	PVC Duct 60mm x 60mm (if extra from 10 feet) Adamjee or equivalent	RFT	100	
	2 Ton Floor Standing			

11	Refrigrent Copper Pipe 2 Ton (if extra from 10 Feet) 22 Guage Muller or equivalent	RFT	100	
	Electric flexible control wire (if extra from 10 Feet)GM or equivalent	RFT	100	
	Drain Pipe 3/4" dia PVC (if extra from 10 feet) Popular or equivalent	RFT	100	
	PVC Duct 60mm x 60mm (if extra from 10 feet) Adamjee or equivalent	RFT	50	
12	4 Ton			
	Refrigrent Copper Pipe 4 Ton (if extra from 10 Feet) 22 Guage Muller or equivalent	RFT	50	
	Electric flexible control wire (if extra from 10 Feet) GM or equivalent	RFT	50	
	Drain Pipe 3/4" dia PVC (if extra from 10 feet) Popular or equivalent	RFT	50	
	PVC Duct 60mm x 60mm (if extra from 10 feet) Adamjee or equivalent	RFT	20	
Bidders are required to quote the unit rates (per RFT) of additional installation items for the quoted category of the Air Conditioner in the Financial Annexure at the end of SBD. Payment shall be made strictly as per actual measurements /consumption at the time of installation in accordance with the quoted unit rates.				
CUI-Lahore Campus will retain 5% of the total value of Warranty Items. The retention money will be released after the warranty period (mentioned in BoQs) subject to a satisfactory report by the end user. The warranty period will be counted from the date of delivery.				
Note: Original manufacturer and dealers directly authorized by the OEM of the quoted brand are eligible to participate.				