

PURCHASE & STORES SECTION

INVITATION FOR ONLINE TENDER (TWO BIDS SYSTEM)

(Tender No: 18/Purchase/MANUU-ITI, HYDERABAD 2018-19-F.22 dt: 11.02.2019)

Sub: MANUU - Purchase & Stores Sections – Supply and installation of Lab Equipment for Refrigeration & Air Conditioning Trade of MANUU, ITI, Hyderabad – Online (through CPPP) Tender Enquiry – Reg.

The Maulana Azad National Urdu University (MANUU), Hyderabad (Central University established by an Act of Parliament in 1998) intends to procure Lab Equipment (*Refrigeration & Air Conditioning Trade*) for the University ITI, Gachibowli, Hyderabad from the prospective bidders. The intended bidders may furnish their quotations (as per the specifications mentioned below) online through Central Public Procurement Portal (CPPP) @<https://eprocure.gov.in/eprocure>. The online bids along with **EMD for Rs. 96,000/-** drawn in favour of Finance Officer, MANUU, Hyderabad (Exemption as per Gol norms will only be considered on production of documentary proof, failing which the bid will be rejected) shall be furnished as per the proforma prescribed (Annexure-2). The bid documents (both Technical bid and financial bid) along with the scanned copy of EMD proof may have to be upload online on CPP Portal on or before **25. February 2019** by **3.00 pm**. However, the original EMD document/DD shall be submitted at Purchase & Stores Section **before closing date** of the bid.

Specification and quantities of Tools / Equipment/ Machinery required for Refrigeration & Air Conditioning:

Sl	Item with Specification	Qty
1	Three door refrigerator Frost Free SPECIFICATIONS : Inverter Compressor;Electronic Temperature Control; Multi-function Touch Control Panel;Triple Zone, Twin Cooling;Multi Air Flow System;Super Freeze and Super Cool Function capacity 300litres with supply 230V and refrigerant gas with HC R-600A. OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1
2	Four door refrigerator Frost Free SPECIFICATIONS : Inverter Compressor;Electronic Temperature Control; Multi-function Touch Control Panel;Triple Zone, Twin Cooling;Multi Air Flow System;Super Freeze and Super Cool Function capacity 300litres with supply 230V and refrigerant gas with HC R-600A, OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1
3	Diamond Core Drilling Machine , SPECIFICATIONS: No Load Speed : 1100 RPM, Power Input : 1350 W, Weight : 12 Kg, Voltage : 240 V, OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery	1
4	Recovering unit with cylinders TRAINER carrying refrigerant CFC & R-134A with supply 230V, SPECIFICATION, Evacuation & refrigerant charging unit consisting of a. rotary 2 stage pump and motor with gas ballast and anti such back b. Manifold with guages and valves capable of pulling vaccum upto 50 microns of Hg and with provision of connecting to a microns level vaccum guage. c.Graduated charging cylinder with provision for temperature control and necessary isolated valves. OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery	1

PURCHASE & STORES SECTION

5	<p>Evacuation and Charging Station TRAINER with SPECIFICATION: Evacuation & refrigerant charging unit consisting of a. rotary 2 stage pump and motor with gas ballast and anti such back. b. Manifold with guages and valves capable of pulling vaccum upto 50 microns of Hg and with provision of connecting to a microns level vaccum guage. c. Graduated charging cylinder with provision for temperature control and necessary isolated valves. and weighing scale OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
6	<p>SPLIT AC TRAINER kit of 1.5 Ton with R-134a or R-22 reciprocating compressor, SPECIFICATION: is wall mounted type, 1.5 Tons/18000BTU/hour capacities, Reverse cycle system, Remote control, Single Phase, Supplied with complete accessories along with fittings, Faults in form of Electrical and Mechanical, Instructional manual, wiring diagram, and warranty card. The system operates on 220-230 Volts A OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
7	<p>SPLIT AC DUCTABLE TRAINER of 1.5 Ton with R-134a or R-22 reciprocating compressor, SPECIFICATION, Precisely engineered Reliable operation, High functionality, Condition: New Driven Type: Electric, OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
8	<p>RECOVERY UNIT WITH CYLINDERS TRAINER carrying refrigerant CFC & R-134A with supply 230V, SPECIFICATION : Evacuation & refrigerant charging unit consisting of a. rotary 2 stage pump and motor with gas ballast and anti such back. b. Manifold with guages and valves OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
9	<p>Cassette AC TRAINER of capacity 4500Kcal/hr with R-404 as refrigerant SPECIFICATION: In the Box Main Unit, Remote Control General Type Cassette, Capacity 1.5 Ton, Functions Cooling, Air Flow Direction Wide Angle Airflow, Refrigerant Type R-404, Compressor Rotary Performance Features, Air Circulation 506 CFM, Moisture Removal 2 Ltrs/Hr, Indoor Sound Level 48 dB, Outdoor Sound Level 65 dB Power, Energy Rating -Energy Efficiency Ratio 10.59, Power Requirements 230 V/ 1 Phase / 50 Hz, Cooling Operating Current 7.4 Amps Power Consumption 1700 W, OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
10	<p>Descaling pump set / Chiller Tube Cleaner TRAINER with Chiller Tube Cleaner, mobile dolly with tool storage box and a single direction foot switch. SPECIFICATIONS : Simple to operate - minimal training required Stainless steel construction - long life, Interchangeable cleaning tools – versatile, Large wheels - easy to move, Simultaneous water flush - removes deposits, Foot switch activation - safe operation Flexible Shaft Speed: 862.5 rpm , Motor Power: 1/2 HP (0.4 kW), Input Power: Standard: 9 amps, 115 V, 60 Hz AC (Optional: 9 amps, 115 V, 50 Hz: 4.5 amps, 230 V, 60 Hz; or 4.5 amps, 230 V, 50 Hz), Dimensions: 37" (940mm) high x 20" (510mm) wide x 17" (430mm) deep, Weight: 49 lbs (22 kg) net dry OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1

PURCHASE & STORES SECTION

11	<p>FAN COIL UNIT TRAINER with water valves 2&3 way SPECIFICATION :Phase Single, Frequency (Hz) 50 Hz Material Copper tubes, Packging Type Box, Voltege 240 V OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
12	<p>SHELL & TUBE DX CHILLER TRAINER 5 Ton CAPACITY with SPECIFICATION : Cu tubing only with mounting plates. Finned copper tube 3/4" OD, No. of copper tube-24 Nos With pressure relief wall, air purging facility. OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
13	<p>CIRCULATING WATER PUMP TRAINER 0.5HP with stainless steel tank capacity 20Lit with inlet/outlet provision, SPECIFICATION, Type: Mechanical Pump, Material: Cast Iron, Impeller: Brass/Aluminum/Plastic Winding: Copper or Aluminum Wire, Voltage: 220V OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
14	<p>SHELL & TUBE TYPE HEAT EXCHANGER TRAINER 5 TON SPECIFICATION : Transparent Casing, Description of Shell And Tube Heat Exchanger Transparent Casing, The Shell And Tube Heat Exchanger Transparent Casing apparatus is used for studying heat transfer through a shell and tube heat exchanger under parallel or counter flow conditions. The unit consists of a shell and tube heat exchanger, and a service module. The module comprises a hot water tank with a transfer pump, instruments for monitoring and control. Parallel and counter flow is by switching cold water hoses. The unit requires outside water supply. Hot water tank and pump. Heater: 3000 W. Flow meters: Hot water and cold water. Power supply: 220V 1Ph 50 Hz. OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
15	<p>BOTTLE COOLER VISIBLE capacity 200L carrying with HFC -134A & reciprocating compressor , OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
16	<p>DISPLAY CABINET , SPECIFICATIONS : Capacity: 2 TON, Supply - 220V, Temperature: 0 °C - 12 °C, OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
17	<p>TRAINER of Ice candy plant 2 Ton with capacity to make 32 ice candy at a time with former tray, stainless steel tank on trolley with SINGLE phase supply SPECIFICATIONS : Voltage 220 V, Type Automatic, Power Source Electrical, Capacity (In Tons) 2 Ton, System consists, 1. Hermetic reciprocating compressor brand new tested and certified by principal manufacturer along with Serial .Number. and guaranty card, capacity 2Ton, 2. Air cooled condenser 2 ton capacity with heavy duty fan, condenser made of copper tube and aluminum fins with housing. 3. Brine cooling coil tank type with agitator motor heavy duty, tank type cooling coil made of stainless steel and copper tube capacity 2 ton 4. Expansion device- an arrangement of a thermostatic expansion valve with hand shut off valve and a capillary tube with hand shut off valve provided using at a time 1 expansion device used and other 2 closed with hand shut off valve for the purpose of experiment 5. HP and LP cut out switch</p>	1



PURCHASE & STORES SECTION

	<p>6. Liquid line indicator 7. Receiver with inlet and outlet valve 8. Solenoid valve 9. solid core filter drier 10. Suction accumulator 11. Pressure gauge 12. Compound gauge 13. Thermostat digital type 14. Hydrometer 15. Temperature meter digital type-3No. 16. Amp meter digital type 17. Energy meter digital type 18. Voltmeter digital type 19. MCB 2 poll as a main switch OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	
18	<p>Package AC TRAINER 5 Ton capacity, air cooled type with open type compressor and reciprocating type, Specifications:lp-hp cutout, glycerine gauge, Voltmeter, ammeter, Blower Supply - 3 phase OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
19	<p>Bus AC Tutorial Model, SPECIFICATIONS : Cooling capacity - 21000kcal/hr, compressor, condensor fan motors, evaporator blower motors, Current - 65amps, voltage-12V Refrigerant gas-R-134a and Alternator - 12V OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
20	<p>Demonstration model of Automatic Ice Cube Machine of capacity 50 kg/hour, SPECIFICATION : Automatic Grade Automatic Production Capacity 1-3 ton/day Ice Form Bar, Power Consumption 10-15 HP OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
21	<p>Demonstration model of VRF/VRV unit with Specification : of two indoor units 2.5Tr each and 5 TR capacity outdoor unit complete with air cooled condensor accessories and controls Supply - 3 phase OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
22	<p>TRAINER OF Split AC with Inverter technology capacity 1.5 TR Demonstration model, SPECIFICATION : Cooling capacity 9.720 Btu/h Electrical Data, Voltage: 220-240 V, 50 Hz, 1 Phase Running current: 3.6 - 3.3 A, Power input: 730 Watt, Indoor unit Air circulation: 10.3 m³/minutes, Moisture removal: 1.7 L/h Sunlight sensor & human activity sensor, Air purifier, Compressor 1 HP Inverter technology, Refrigerant Environmentally friendly refrigerant of R410A, Measurement components, Low side pressure gauge, 500 ps, High side pressure gauge, 800 psi, Digital panel meter (Ampere, Voltage, and Power), OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	2
23	<p>TRAINER Walk in cooler with PUF insulation for cold room of size 6 x 5 x 8 OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1



PURCHASE & STORES SECTION

24	<p>SINGLE STAGE ABSORPTION SYSTEM TRAINER with SPECIFICATION : Generator, Condenser, Evaporator, Absorber, Liquid jet pump, refrigeration storage, absorber pump, heat exchanger and evaporator spray pump. The principal of the absorption refrigeration demonstrator is often difficult to understand as this principle is not at the first sight like the refrigeration system with a built-in compressor. This impression is intensified by the fact that the unit is built in to the refrigerator itself so it is almost impossible to get a general view of the flow and the piping. The Model: IPC-612 demonstrator, the insides have been removed from an absorption unit and placed in such a way that it can immediately be compared with the enclosed flow diagram. The warm side is separated from the cold side. The system can function both with 12V and 220V. Heat Source 220V and 12V heater, 85W Working fluids. Ammonia OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1
25	<p>TRAINER OF Water Cooler Storage type capacity 200 litres Carrying HFC-134A and reciprocating compressor OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery</p>	1

1. Submission of Bids:

- 1.1 The technical and financial bids should be furnished in Annexure-I and Annexure-II respectively and both the bids should be submitted through online only along with the requisite documents.
- 1.2 Conditional and incomplete bids will be rejected summarily.
- 1.3 The bids must be submitted before due date and time.
- 1.4 **Modification and Withdrawal of Bids:** The bidder may modify or withdraw his bid through online before last date for submission of the Bids.
- 1.5 No tender will be accepted after the date of opening and time as specified in the tender enquiry for any other reasons.
- 1.6 The bidders shall have to ascertain the exact percentage of GST applicable on each of the items while quoting the rates in the financial bid (Annexure-2). In case of discrepancy/difference of opinion on GST rates, the University shall decide the lowest quotation on verification of the relevant rules of the GST Act vis-à-vis supporting documents provided by the bidders in respect of the claim for the GST. The decision of the University shall be final and binding in this regard.
- 1.7 The University reserves all the rights to place the Purchase Order item wise with the firm quoting L-1 rates. In case, if two or more number of firms quotes the same rate, then the L1 will be decided based on the additional Warranty offered (if any). Even then, if there is tie between bidders, separate sealed quotation will be obtained with short notice from such bidders.





PURCHASE & STORES SECTION

2. Submission of EMD

- 2.1 The firms should submit EMD of Rs.96,000/- in the form of Demand Draft / Bank Guarantee / Fixed Deposit drawn in favour of Finance Officer, MANUU payable at Hyderabad in original by post or by hand. Scanned copy of EMD should be uploaded along with Technical bid document. Exemption as per govt. norms will be considered on production of documentary proof.
- 2.2 The EMD of the unsuccessful bidders will be returned within 60 days after closing date of the bid or within 30 days after finalizing the bid without interest. The EMD of the successful bidder will be returned on submission of Performance Security.

3. Opening of Bids

- 3.1 Technical bid would be opened online only and scrutinized as per the eligibility criteria prescribed.
- 3.2 Financial bids of only technically qualified bidders will be opened by the authorized officers of the University.
- 3.3 The bidder must provide the services as per the specifications mentioned in the tender. The firms may also quote for higher specifications. However, the criteria for requirement would be based on the actual specifications mentioned in this tender document.
- 3.4 Prices are to be quoted both in figures through online only. Amount quoted as '0' (zero) in the financial bid will be treated as non-responsive and next L1 figures will be considered. In case of a discrepancy, quoted amount in words/lowest amount will be taken as valid. The quotation should be valid for a minimum period of 60 days from the closing date of tender.

4. Pre-qualification (eligibility) criteria:

- 4.1 The bidder should be a registered firm / supplier with GSTIN.
- 4.2 The firm should submit an EMD of Rs.96,000/-
- 4.3 The firm should submit the OEM Certificate or authorization certificate specific to this tender.
- 4.4 The firm should submit item wise compliance report with respect to specification and warranty etc. any deviation of quality will be summarily rejected.
- 4.5 The bidder must upload Annexure – I duly filled in.
- 4.6 A) The bidder must have achieved the minimum average annual turnover of **Rs.15,48,560/-** on supply of the similar items during the last three financial years.
B) In addition to the above, the bidder must have supplied the;
 - i. Similar items on three Purchase Orders worth **Rs.7,74,280/-** each (or)
 - ii. Similar items on two Purchase Orders worth **Rs.9,67,850/-** each (or)
 - iii. Similar items on one Purchase Order worth **Rs.15,48,560/-**

During the last 5 years period between 01.04.2013 to 31.03.2018



PURCHASE & STORES SECTION

5. Job Requirement

- 5.1 Supply and Installation/Demonstration of **Tools / Equipment / Machinery for Refrigeration and Air Conditioning Trade of MANUU, ITI, Hyderabad.**
- 5.2 The quantity included in the bid can be increased or decreased at the discretion of the Competent Authority, Maulana Azad National Urdu University Hyderabad, while issuing the purchase order. The University reserves the right to issue supplementary purchase order upto 25% of the bid value within three months from the date of Award of Contract on the same price and terms & conditions.

6. Delivery & Payment:

- 6.1 The supply of said items has to be made within a period of **15 days** from the date of award of contract (AOC).
- i) Failure to supply the material within the stipulated period shall entitle the Procuring Entity (MANUU) for imposition of penalty @ 1/2% (half percent) per day on the total value of the item covered in the purchase order, subject to a maximum of 5% (five percent) after expiry of the stipulated time period of the supply unless extension is obtained in writing from the office on valid ground before expiry of delivery period. In any case the delivery (including installation/demonstration) shall not be made on or after 28.03.2019.
- ii) If the deliveries are not maintained and due to that account Procuring Entity is forced to buy the material at your risk and cost from elsewhere, the loss or damage that may be sustained thereby would be recovered from the defaulting supplier.
- 6.2 The selected firms should submit 10% value of Award of Contract (AOC) as Performance Security in the form of D.D/ Fixed Deposit Receipt / Bank Guarantee in favour of MANUU payable at Hyderabad which would be released (without interest) after supply of material as per specifications and after fulfilling of all tender obligations. In case, the goods supplied are under warranty, the 10% Performance Security will be released after 60 days after completion of Warranty period without any Interest. 50% of Security amount will be released for item with 5 years warranty on Compressor after 1 year warranty + 60 days and 50% remaining after 5 years + 60 days. The account details are as follows;
- | | | |
|-------------|---|---------------------------------------|
| A/c. Name | : | Maulana Azad National Urdu University |
| A/c. Number | : | 18790100000001 |
| Bank | : | Indian Overseas Bank |
| Branch | : | Gachibowli, Hyderabad-500 032 |
| IFSC Code | : | IOBA0001879 |
- 6.3 **Payment:** 100% payment after receipt of the goods, inspection, installation (if any) at concerned office site in good condition and acceptance by the consignee, within 30 (thirty) days provided the successful bidder should have been furnished the 10% Performance Guarantee.
- 6.4 No advance payments will be made.



PURCHASE & STORES SECTION

6.5 MANU University GSTIN: 36HYDM03116B1DT.

6.6 The items procured are exclusively for the students for academic purpose only.

7. Termination of the contract:

7.1 If the information provided by the firm during the process of contract is found false at later stage, the University reserves the right to cancel the Purchase Order and / or blacklist the firm.

7.2 Sub-letting of this contract is not permissible.

7.3 This Request for Proposal (RFP) is issued with no financial commitment and the Buyer (MANUU) reserves the right to change or vary any part thereof or foreclose the procurement process at any stage. The Buyer also reserves the right to disqualify any vendor, should it be necessary, at any stage.

7.4 In case of any dispute, Hyderabad will be the Jurisdiction. The Registrar, Maulana Azad National Urdu University, Hyderabad shall decide the issue and his decision will be final and shall be binding on the both parties.

Registrar

Maulana Azad National Urdu University
Gachibowli, Hyderabad- 500032



PURCHASE & STORES SECTION

Instructions for filling up BOQ (Online Only)

Name of the Bidder/ Bidding Firm / Company :

PRICE SCHEDULE
(DOMESTIC TENDERS – RATES ARE TO GIVEN IN RUPEES (INR) ONLY)
(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder in Rs. P	GST Amount on Item Qty x Basic Rate in INR Rs. P	TOTAL AMOUNT Without Taxes col (13) = (4) x (7) in Rs. P	TOTAL AMOUNT With Taxes col (14) = sum (8) to (13) in Rs. P	TOTAL AMOUNT In Words
1	2	4	5	7	9	13	14	15

Name of the firm

Unit Price (in Rupees) without GST

Total GST amount (in Rupees) i.e. Qty. x unit price x GST%



PURCHASE & STORES SECTION

Annexure-1 (Technical Bid)

1.	Name of the Firm	M/s.
	Postal Address	
	Contact No (s)	
	E-mail ID	
	Account Number	
	Name of the Account Holder / Firm / Agency	
	Bank Name	
	Branch Name & Details	
	IFSC Code	
2.	Details of EMD of Rs.96,000/- (Exemption for registering with MSME NSIC, N.C.C.F. Kendriya Bhandar etc as per GoI norms will only be considered on production of documentary proof, failing which the bid will be rejected) The EMD shall be 10submitted at Purchase & Stores Section before closing date.	D.D. No. _____ dated: _____ Bank _____ (upload documentary proof if exemption is claimed)
3.	Firm Registration Details	(Yes / No) (upload Firm registration certificate)
4.	GST Registration Details	(Yes / No) (upload GST registration certificate)
5.	OEM Certificate or Authorization certificate specific to this tender	(Yes / No) (upload Documentary proof)
6.	Compliance report of each items	(Yes / No) (upload item-wise compliance report)
7.	Average Annual Turnover of Rs. 15,48,560 during the preceding three years (Attach scanned copy of audited balance sheet and Profit & Loss Account for these years. Certificate Certified by CA) (as per tender clause 4.6 (A))	(Yes / No) (upload Documentary proof)
8.	Value of Purchase Orders of equipments carried out during the preceding five years, (Attach scanned copy of Purchase Orders) [as per tender clause 4.6 (B)]	(Yes / No) (upload Documentary proof)

Declaration: i) That we have not been debarred by any Government Department/Under taking.

iii) It is hereby declared that the firm have carefully read and understood the tender document and **agreed with all the terms and conditions** of the tender, Hyderabad jurisdiction etc., and agreed that the decision of the University shall be final in all respect.

Place :
Date :2019

Signature of the authorized
Dealer/signatory of the firm

PURCHASE & STORES SECTION

Annexure-2 (Financial Bid)

(To be filled Online as per the CPPP format only)

Name of the Bidder/ Bidding Firm / Company :		PRICE SCHEDULE (DOMESTIC TENDERS – RATES ARE TO GIVEN IN RUPEES (INR) ONLY) (This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
NUM BER #	TEXT #	NUM ER #	TEXT #	NUMBER #	NUMBER	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder in Rs. P	GST Amount on Item Qty x Basic Rate in INR Rs. P	TOTAL AMOUNT Without Taxes col (13) = (4) x (7) Rs. P	TOTAL AMOUNT With Taxes col (14) = sum (8) to (13) Rs. P	TOTAL AMOUNT In Words
1	2	4	5	7	9	13	14	15
1	Procurement of Tools / Equipment / Machinery for Refrigeration & Air Condition Trade							
1.1	Three door refrigerator Frost Free SPECIFICATIONS : Inverter Compressor,Electronic Temperature Control, Multi-function Touch Control Panel;Triple Zone, Twin Cooling;Multi Air Flow System;Super Freeze and Super Cool Function capacity 300litres with supply 230V and refrigerant gas with HC R-600A, OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.2	Four door refrigerator Frost Free SPECIFICATIONS : Inverter Compressor,Electronic Temperature Control; Multi-function Touch Control Panel;Triple Zone, Twin Cooling;Multi Air Flow System;Super Freeze and Super Cool Function capacity 300litres with supply 230V and refrigerant gas with HC R-600A, OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.3	Diamond Core Drilling Machine , SPECIFICATIONS:No Load Speed : 1100 RPM, Power Input : 1350 W, Weight : 12 Kg, Voltage : 240 V, OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.4	Recovering unit with cylinders TRAINER carrying refrigerant CFC & R-134A with supply 230V, SPECIFICATION, Evacuation & refrigerant charging unit consisting of a. rotary 2 stage pump and motor with gas ballast and anti such back b. Manifold with guages and valves capable of pulling vaccum upto 50 microns of Hg and with provision of connecting to a microns level vaccum guage. c.Graduated charging cylinder with provision for temperature control and necessary isolated valves. OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.5	Evacuation and Charging Station TRAINER with SPECIFICATION: Evacuation & refrigerant charging unit consisting of a. rotary 2 stage pump and motor with gas ballast and anti such back. b. Manifold with guages and valves capable of pulling vaccum upto 50 microns of Hg and with provision of	1	No			0.00	0.00	INR Zero Only

PURCHASE & STORES SECTION

	connecting to a microns level vacuum gauge. c. Graduated charging cylinder with provision for temperature control and necessary isolated valves and weighing scale OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery							
1.6	SPLIT AC TRAINER kit of 1.5 Ton with R-134a or R-22 reciprocating compressor, SPECIFICATION: is wall mounted type, 1.5 Tons/18000BTU/hour capacities, Reverse cycle system, Remote control, Single Phase, Supplied with complete accessories along with fittings, Faults in form of Electrical and Mechanical, Instructional manual, wiring diagram, and warranty card. The system operates on 220-230 Volts A OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.7	SPLIT AC DUCTABLE TRAINER of 1.5 Ton with R-134a or R-22 reciprocating compressor, SPECIFICATION, Precisely engineered Reliable operation. High functionality. Condition: New Driven Type: Electric, OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.8	RECOVERY UNIT WITH CYLINDERS TRAINER carrying refrigerant CFC & R-134A with supply 230V, SPECIFICATION : Evacuation & refrigerant charging unit consisting of a. rotary 2 stage pump and motor with gas ballast and anti such back b. Manifold with gauges and valves OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.9	Cassette AC TRAINER of capacity 4500Kcal/hr with R-404 as refrigerant SPECIFICATION: In the Box Main Unit, Remote Control General Type Cassette, Capacity 1.5 Ton, Functions Cooling, Air Flow Direction Wide Angle Airflow, Refrigerant Type R-404, Compressor Rotary Performance Features, Air Circulation 506 CFM, Moisture Removal 2 Ltrs/Hr, Indoor Sound Level 48 dB, Outdoor Sound Level 65 dB Power, Energy Rating -Energy Efficiency Ratio 10.59, Power Requirements 230 V/ 1 Phase / 50 Hz, Cooling Operating Current 7.4 Amps Power Consumption 1700 W, OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.10	Descaling pump set / Chiller Tube Cleaner TRAINER with Chiller Tube Cleaner, mobile dolly with tool storage box and a single direction foot switch. SPECIFICATIONS : Simple to operate - minimal training required Stainless steel construction - long life, Interchangeable cleaning tools - versatile, Large wheels - easy to move, Simultaneous water flush - removes deposits, Foot switch activation - safe operation Flexible Shaft Speed: 862.5 rpm, Motor Power: 1/2 HP (0.4 kW), Input Power: Standard: 9 amps, 115 V, 60 Hz AC (Optional: 9 amps, 115 V, 50 Hz; 4.5 amps, 230 V, 60 Hz; or 4.5 amps, 230 V, 50 Hz), Dimensions: 37" (940mm) high x 20" (510mm) wide x 17" (430mm) deep, Weight: 49 lbs (22 kg) net dry OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only

PURCHASE & STORES SECTION

1.11	FAN COIL UNIT TRAINER with water valves 2&3 way SPECIFICATION :Phase Single. Frequency (Hz) 50 Hz Material Copper tubes. Packing Type Box, Voltege 240 V OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.12	SHELL & TUBE DX CHILLER TRAINER 5 Ton CAPACITY with SPECIFICATION : Cu tubing only with mounting plates. Finned copper tube 3/4" OD. No. of copper tube-24 Nos With pressure relief wall, air purging facility. OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.13	CIRCULATING WATER PUMP TRAINER 0.5HP with stainless steel tank capacity 20Lit with inlet/outlet provision, SPECIFICATION, Type: Mechanical Pump, Material: Cast Iron, Impeller: Brass/Aluminum/Plastic Winding. Copper or Aluminum Wire, Voltage: 220V OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.14	SHELL & TUBE TYPE HEAT EXCHANGER TRAINER 5 TON SPECIFICATION : Transparent Casing. Description of Shell And Tube Heat Exchanger Transparent Casing. The Shell And Tube Heat Exchanger Transparent Casing apparatus is used for studying heat transfer through a shell and tube heat exchanger under parallel or counter flow conditions. The unit consists of a shell and tube heat exchanger, and a service module. The module comprises a hot water tank with a transfer pump, instruments for monitoring and control. Parallel and counter flow is by switching cold water hoses. The unit requires outside water supply. Hot water tank and pump Heater: 3000 W. Flow meters: Hot water and cold water. Power supply: 220V 1Ph 50 Hz. OEM Warranty : 1 Year Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.15	BOTTLE COOLER VISIBLE capacity 200L carrying with HFC -134A & reciprocating compressor OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.16	DISPLAY CABINET , SPECIFICATIONS : Capacity: 2 TON, Supply - 220V, Temperature: 0 °C - 12 °C OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.17	TRAINER of Ice candy plant 2 Ton with capacity to make 32 ice candy at a time with former tray, stainless steel tank on trolley with SINGLE phase supply SPECIFICATIONS : Voltage 220 V, Type Automatic, Power Source Electrical, Capacity (In Tons) 2 Ton. System consists. 1. Hermetic reciprocating compressor brand new tested and certified by principal manufacturer along with Serial .Number. and guaranty card, capacity 2Ton, 2. Air cooled condenser 2 ton capacity with heavy duty fan, condenser made of copper tube and aluminum fins with housing. 3. Brine cooling coil tank type with agitator motor heavy duty, tank type cooling coil made of stainless steel and copper tube capacity 2 ton 4. Expansion device- an arrangement of a thermostatic expansion valve with hand shut off valve and a capillary tube with hand shut off valve provided using	1	No			0.00	0.00	INR Zero Only

PURCHASE & STORES SECTION

	at a time 1 expansion device used and other 2 closed with hand shut off valve for the purpose of experiment 5. HP and LP cut out switch 6. Liquid line indicator 7 Receiver with inlet and outlet valve 8. Solenoid valve 9. solid core filter drier 10. Suction accumulator 11. Pressure gauge 12. Compound gauge 13. Thermostat digital type 14. Hydrometer 15. Temperature meter digital type-3No. 16. Amp meter digital type 17. Energy meter digital type 18. Voltmeter digital type 19. MCB 2 poll as a main switch OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery							
1.18	Package AC TRAINER 5 Ton capacity, air cooled type with open type compressor and reciprocating type. Specifications:lp-hp cutout, glycerine gauge, Voltmeter, ammeter. Blower Supply - 3 phase OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.19	Bus AC Tutorial Model, SPECIFICATIONS : Cooling capacity - 21000kcal/hr, compressor, condensor fan motors, evaporator blower motors, Current - 65amps, voltage-12V Refrigerant gas-R-134a and Alternator - 12V OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.20	Demonstration model of Automatic Ice Cube Machine of capacity 50 kg/hour, SPECIFICATION : Automatic Grade Automatic Production Capacity 1-3 ton/day Ice Form Bar. Power Consumption 10-15 HP OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.21	Demonstration model of VRF/VRV unit with Specification : of two indoor units 2.5Tr each and 5 TR capacity outdoor unit complete with air cooled condensor accessories and controls Supply - 3 phase OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.22	TRAINER OF Split AC with Inverter technology capacity 1.5 TR Demonstration model, SPECIFICATION : Cooling capacity 9.720 Btu/h Electrical Data, Voltage: 220-240 V, 50 Hz, 1 Phase Running current: 3.6 - 3.3 A, Power input: 730 Watt, Indoor unit Air circulation: 10.3 m ³ /minutes, Moisture removal: 1.7 L/h Sunlight sensor & human activity sensor, Air purifier, Compressor 1 HP Inverter technology, Refrigerant Environmentally friendly refrigerant of R410A, Measurement components, Low side pressure gauge, 500 ps, High side pressure gauge, 800 psi, Digital panel meter (Ampere, Voltage, and Power). OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	2	No			0.00	0.00	INR Zero Only
1.23	TRAINER Walk in cooler with PUF insulation for cold room of size 6 x 5 x 8 OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the	1	No			0.00	0.00	INR Zero Only



PURCHASE & STORES SECTION

	concerned staff at the time of delivery							
1.24	SINGLE STAGE ABSORBITION SYSTEM TRAINER with SPECIFICATION : Generator, Condensor, Evaporator, Absorber, Liquid jet pump, refrigeration storage, absoabsorber pump, heat exchanger and evaporator spray pump.The principal of the absorption refrigeration demonstrator is often difficult to understand as this principle is not at the first sight like the refrigeration system with a built-in compressor. This impression is intensified by the fact that the unit is built in to the refrigerator it self so it is almost impossible to get a general view of the flow and the piping. The Model: IPC-612 demonstrator, the insides have been removed from an absorption unit and placed in such a way that it can immediately be compared with the enclosed flow diagram. The warm side is separated from the cold side. The system can function both with 12V and 220V. Heat Source 220V and 12V heater, 85W Working fluids. Ammonia OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
1.25	TRAINER OF Water Cooler Storage type capacity 200 litres Carring HFC-134A and reciprocating compressor OEM Warranty : 1 Year and Compressor 5 Years Demonstration of the item should be given to the concerned staff at the time of delivery	1	No			0.00	0.00	INR Zero Only
Total in Figures						0.00	0.00	INR Zero Only
Quoted Rate in Words								