

REFRIGERATION & AIR CONDITIONING TECHNICIAN (709/710)

The institutions having the following requisite infrastructure, may apply for accreditation:

A. Classroom :

Class room for 25 students (Minimum area 225 sq. ft.) should have proper ventilation, well-illuminated black board/white board and availability of adequate furniture and ceiling fans.

B. Workshop :

The workshop size for 25 students should be at least 25ft. x 20 ft. with adequate lighting and exhaust & ceiling Fans. The workshop should have the following Tool/Equipments/Apparatus or material for Practical Training.

C. Faculty and Supporting Staff :

Faculty & Supporting Staff	Educational/Professional Qualification	No.
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Coordinator	Degree/Diploma in appropriate Branch with 5 years experience	01
Instructor	Diploma in Mechanical Engineering or ITI Certificate in Air Conditioning trade with 2 yrs. Experience	01

D. List of Tools and Equipment :

Sl. no	Tolls/Equipment/Apparatus or requirements material for Practical Training	Quantity
1.	Flaring tool set	3
2.	Tube cutter	3
3.	Swaging tool set	3
4.	Gasket punch set	2
5.	Pines Off Tool	2
6.	Tube bender-spring type- mechanical type	3
7.	Cylinder Valve key	2
8.	Pinching Pliers	5 each

9.	Amp meter 0-5 amps & Amp meter 0-30 amps	2+2
10.	Thermometer F & C	2 each
11.	Vacuum pump	1
12.	Gas charging line	2
13.	Pressure gauge & Compound gauge	2
14.	Multi meters digital	01
15.	Gas cylinder F-12-2kg & F-22-2kg capacity, R-134A-1 Hydro Carbon	01 each
16.	Air Blower	01
17.	Dry Nitrogen cylinder	01
18.	Water purifiers	01
19.	File Flat, Round, Half Round 200mm	2 each
20.	Flat --- 200mm	2
21.	Steel Rule	1
22.	Steel Tape 5 meter	1
23.	Hammer Ball Pane JK	2
24.	Combination Plier 200mm	5
25.	Screw Driver Feat Tip, 150,200,250	2 each
26.	Screw Driver Philips	2nos.
27.	Caliper, O/S & 1/S	1 each
28.	long nose pliers 150	2
29.	Centre Punch 200mm	1
30.	Spanner Set, Box & Flat End	2 each
31.	Line tester	5
32.	Screw 150mm	1

33.	Pully Puller 200mm	1
34.	Voltage stabilizer –4 KVA Gas charging & evacuation Unit –1 - Voltage stabilizer (desirable inverter/generator) 1KVA – 1 - Clamp meter (Tong tester) for current detection –1	1 each
35.	Soldering Iron 50 & 20	1 each
36.	Open type Compressor Reciprocating	02
37.	Sealed type Compressor Reciprocating	02
38.	Old Refrigerator for demonstration/ Practical	02
39.	Old Window type air conditioner for demonstration/Practical	02
40.	Old water cooler for demonstration/ practical	02
41.	Recycle Psychometric chart	1
42.	Feeler gauze	1
43.	Pipe wrench 200	1
44.	Adjustable wrench 200	1
45.	Blow lamp 1 or 2 pint	1
46.	LPG cylinder with torch and regulator	1 set
47.	Fire Extinguisher	

E. Physical Facilities :

The institution should have the facilities for Drinking water, bathrooms & toilets.

F. Library :

Library should have a minimum 20 books/articles/magazines etc. in related subject.

G. Batch Size :

Maximum 25 students in one batch, an institution can run maximum of 4 batches for this course.