

Roll No.

--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(AE) (2011 Onwards) (Sem.-6)

AUTOMOTIVE HEATING, VENTILATION & AIR CONDITIONING

Subject Code : BTAE-602

M.Code : 71218

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**1. Answer briefly :**

- a. What do you mean by term air conditioning?
- b. What is function of a capillary tube?
- c. List two properties of ideal refrigerant.
- d. What are eco-friendly refrigerants?
- e. List various methods of refrigerant leak detection.
- f. What do you mean by wet bulb temperature?
- g. Is moist air a pure substance, explain your answer?
- h. What is saturated air?
- i. What is purging of air in an air-conditioning system?
- j. What is global warming potential?



SECTION-B

2. Explain the working of basic car air conditioning system.
3. Troubleshoot the following causes :
 - a. Unit runs but poor refrigeration.
 - b. Low suction pressure in a refrigeration system.
4. What are different types of automotive heater? Explain automatically controlled air- conditioning heating system.
5. Classify various types of refrigerants.
6. Explain the various basic psychrometric properties of moist air.

SECTION-C

7. Explain different types of air distribution system with help of neat sketch.
8. Explain various methods of refrigerant leak detection.
9. Explain the various properties of ideal refrigerant.

NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC against the Student.