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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:

- 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.

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