Roll No. _____

END SEMESTER EXAMINATION

SEMESTER-V

COURSE CODE : AE-501 **DURATION :2 (TWO)HRS**
COURSE TITLE : Automotive Air Conditioning **MAXIMUM MARKS : 50**
SESSION : JULY-DEC' 2021 **PASS MARKS : 35 %**

NOTE:
1. All the questions are compulsory
2. Attempt any 5 (five) questions.
3. Mark for each question is shown against it.
4. Assume suitable logical data wherever necessary.

1. **(a)** Write a short note on three door system that controls the air flow through an automotive heater along with neat diagram. **(5)**

(b) Explain heater and conditioner services and also write down different types of problem occur in auto air conditioning. **(5)**

2. **(a)** Discuss refrigerant leak detector. **(4)**

(b) Explain the procedure for Discharging Refrigeration and also write the equipments used and preventive measures to be taken during the process. **(6)**

3. **(a)** Discuss enemies of air conditioner. **(5)**

(b) Explain the process of adding Refrigerant oil. **(5)**

4. **(a)** Explain vapour compression refrigeration cycle along with suitable diagram. **(10)**

5. **(a)** Write a short note on causes and correction for the following complaints. **(2X5=10)**

i) Coolant leak
ii) Too much heat
iii) Odour from heater
iv) Insufficient defrosting
v) Blower motor inoperative.

6. **(a)** Write down the steps that should be taken during air conditioner service. **(5)**

(b) Explain Air conditioner performance test. **(5)**

7. **(a)** What do you mean by ventilation. Discuss different types of ventilation. **(5)**

(b) Write down some of the properties of refrigerant. **(5)**

8. **(a)** Explain in detail about the compatibility of vehicle for auto air conditioning retrofitting. **(10)**

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