

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Voc. (AS) (Sem.-4)

AUTOMOTIVE REFRIGERATION & AIR-CONDITIONING

Subject Code : 6.GV.06

M.Code : 79993

Date of Examination : 22-12-2022

Time : 3 Hrs.

Max. Marks : 30

INSTRUCTIONS TO CANDIDATES :

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

SECTION-A

1. Write briefly :

- a) Define Bell Coleman Cycle.
- b) List the operating parameters for performance of AC system.
- c) Write about legislation for automotive AC system.
- d) What is roll of accumulator?
- e) Illustrate cool-down performance.
- f) What types of blower fans are used in automotives?
- g) What is roll of sensors in load calculations?
- h) Write about sight glass.
- i) What is system flushing?
- j) List the air conditioning components.

SECTION-B

2. Explain vapour absorption refrigeration system.
3. How does refrigerant charge capacity is determined?
4. Describe psychometric processes with example.
5. Discuss about outside and inside design consideration for load analysis.
6. Explain refrigerant safety/handling for automotives.

SECTION-C

7. Discuss in detail about design guidelines of air conditioning system.
8. **Write note on:**
 - a) Illustrate receiver driers and desiccants, and b) Air distribution modes.
9. How does load calculation for AC is done for automobiles? Explain with example.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.