

**Roll No.**

[illegible]

**Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Voc. (Automobile Servicing) (Sem.-1)**  
**AUTOMOBILE ELECTRIC EQUIPMENT**

**Subject Code : 5.GV.02**

**M.Code : 77014**

**Date of Examination: 12-01-2023**

**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 **2½** (Two and Half) marks each and students has to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **FIVE** marks each and students has to attempt any **TWO** questions.

## SECTION-A

**1. Answer briefly :**

- (a) Discuss the meaning of earth return systems in automobile, wiring system.
- (b) What are the uses of general-purpose cables in automobile wiring system?
- (c) What are battery life enhancers?
- (d) What are VRLA batteries?
- (e) Discuss various ways of battery failures.
- (f) What are alternators and give its advantages over dynamo?
- (g) What do you mean by current and voltage regulators?
- (h) Explain the functions of fuses in circuits.
- (i) Explain the uses of generator drive in dynamo.
- (j) What are alkaline type batteries?

### **SECTION-B**

2. Explain the specifications and colour codes of various cables used in automobile wiring system.
3. What are fuel cells? Give their applications and discuss its. Types.
4. Discuss with suitable diagram the construction details of Dynamo.
5. Explain in brief the principle of generation of A.C with suitable diagram.
6. Discuss what do you mean by double-contact and compensated voltage-control regulators.

### **SECTION-C**

7. Write a short note on Maintenance-free batteries.
8. Write a short note on plastic fibre-optics wires used for automobile wiring system.
9. What is electrolyte? Explain the specific gravity of electrolyte and affect of its variation with temperature.

**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.**