

**Roll No.**

**Total No. of Pages : 02**

**Total No. of Questions : 09**

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

**Subject Code : 6.G V.05**

**M.Code : 79992**

**Date of Examination : 20-12-2022**

**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) Illustrate compression ignition of diesel engines.
  - b) What should be properties of good lubricating oil?
  - c) Brief about shape of cooling fins.
  - d) Give examples of vehicles in which there is Dual mode engine.
  - e) What is difference between primary and secondary filters?
  - f) Write about common rail direct injection.
  - g) What are disadvantages of carburetors?
  - h) Define pre-ignition.
  - i) Define MPI.
  - j) What is morse method of finding IHP?

### SECTION-B

2. What is difference between lubrication in 2 stroke engines and 4-stroke multi cylinder petrol engines? Also explain dry and wet sump lubrication.
3. Explain in detail the different methods of cooling in engines.
4. What is piezoelectric effect and its use in CRDI?
5. Explain the phenomenon of combustion and detonation.
6. Discuss about various losses in an engine.

### SECTION-C

7. Explain the construction and working of distributor pump.
8. What are non-conventional fuels? Explain the method of manufacturing of **any one** of it and also discuss about its performance as IC engine fuel.
9. With help of block diagram describe EFI in detail with its advantages.

**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.**