

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 09

B.Voc (AS) (Sem.-6)
OFF-ROAD VEHICLES

Subject Code : 7.GV.07

M.Code : 91635

Date of Examination: 07-01-2023

Time : 3 Hrs.

Max. Marks : 30

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **ONE** marks 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) Discuss the history of off-road machines.
- (b) What are multi-axle vehicles?
- (c) What are earth-moving machines?
- (d) Define Bulldozers.
- (e) Discuss the applications of heavy wheeled tractors.
- (f) What is the significance of combat vehicles?
- (g) What are dry disc caliper brakes?
- (h) Define the mobility index.
- (i) Explain various factors affecting traction performance.
- (j) Discuss the applications of off-road machines.

SECTION-B

2. Discuss the special features and constructional details of tankers.
3. Discuss various factors affecting the efficiency of output of tractors.
4. Explain with suitable diagram hydro-pneumatic suspension cylinders.
5. Write a short note on Soil Vehicle Mechanics.
6. Discuss various methods to calculate power and capacity of earth moving machines.

SECTION-C

7. Write a brief note on braking system and actuation of Combat vehicles.
8. Discuss various safety features and safe warning systems for dumpers.
9. Explain various characteristics of soils with respect to vehicle evaluation mobility.

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.