

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Automobile Engineering) (2012 Onwards) (Sem.-7)

OFF ROAD VEHICLES

Subject Code : BTAE/DE-711

M.Code : 71821

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

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

SECTION-A

- 1. Answer briefly :**
- a) Trailers are used for what purpose?
 - b) Give an overview of off-road vehicles.
 - c) List the various functions of tractors.
 - d) Write note on modern tractor design.
 - e) Illustrate about Trailers.
 - f) What is need of crawler crane?
 - g) How cement mixing trucks is special?
 - h) Briefly discuss about drag line.
 - i) Write about the special features of gun carriers.
 - j) List different all-wheel drive vehicles.

SECTION-B

2. Name different types of off-road vehicles according to various off-road applications.
3. Explain power shift transmission in caterpillar tractor.
4. Explain in detail about the construction detail of scrapers.
5. Illustrate the merits and demerits of tractors.
6. Discuss about the light-duty tractors.

SECTION-C

7. Illustrate in detail about the constructional details and working features of Dump trucks.
8. Discuss about :
 - a) Truck mounted cranes and
 - b) Ditchers.
9. Explain the special features and constructional detail of military recovery vehicle.

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