

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech. (Automobile Engineering) (Sem.-7)**

**OFF ROAD VEHICLES**

**Subject Code : BTAE/DE-711**

**Paper ID : [A2936]**

**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) What are the applications of land clearing machines?
- b) Write short note on Ditchers.
- c) List the types of tractors.
- d) What are recent trends in tractor design in India?
- e) Name atleast four types of earth moving machines.
- f) What are applications of road pavers?
- g) Briefly discuss about elevating graders.
- h) What are special features of gun carriers?
- i) Brief about wheel drive vehicles.
- j) Illustrate about Trailers.

### SECTION-B

2. List various types of off-road vehicles. Why are they required?
3. On what bases capacity of multi axle vehicles are decided? What are their applications?
4. Explain in detail about the working features of cement mixing trucks.
5. What are troubleshooting of tractors?
6. Discuss about the medium and heavy duty tractors.

### SECTION-C

7. Illustrate in detail about the constructional details of any one wheel drive vehicle.
8. Write note on :
  - a) Dump trucks,
  - b) Ditchers.
9. Describe in detail about the special features and constructional detail of tankers.

**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.**