

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(AE) (E-I 2011 Onwards) (Sem.-6)
TRACTOR & EARTH MOVING MACHINERY
Subject Code : BTAE/DE-613
M.Code : 71225

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION 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) On what types of tracks do earth moving machines have to work?
- b) State the working principle of braking.
- c) List the application of special purpose vehicles.
- d) Write short note on compound transmission.
- e) What are the safety devices used in earth moving machines?
- f) Brief about ripper.
- g) Classify tractors.
- h) What do understand by multi-axle vehicles?
- i) Why front wheels of tractor are smaller than rear wheels?
- j) Brief about auxiliary transmission.

SECTION-B

2. Describe the classification of Special purpose vehicles.
3. Illustrate the stability and design features of mobile cranes.
4. Discuss constructional features of excavator.
5. Write briefly about operation of tractors.
6. Write short note on working principle of electrical systems.

SECTION-C

7.
 - a) Write in detail about articulated vehicles.
 - b) Discuss twin and triple countershaft transmissions.
8. Describe main tractor assemblies. What is function of farm tractors?
9. Illustrate in detail about construction and working front end loader.

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.