



CBCS SCHEME

15AU741

Seventh Semester B.E. Degree Examination, July/August 2021 Earthmoving Equipment and Tractors

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions.

- 1 a. Name the types of earth moving equipments, and write their respective applications. (08 Marks)
b. Briefly discuss the working of bulldozers with sketch. (08 Marks)
- 2 a. How motor graders and compactors are useful in the construction of roads? (08 Marks)
b. List out the various attachment to the tractors. Mention their applications. (08 Marks)
- 3 a. Enlist the different working system of engine and highlight the special features for earth moving vehicle. (08 Marks)
b. Explain the importance of turbochargers and after coolers in earthmoving vehicle engine. (08 Marks)
- 4 a. With the aid of neat sketch, briefly explain the undercarriage components of a earth moving vehicle. (08 Marks)
b. Compare tyred Vs tracked type of vehicle. (08 Marks)
- 5 a. Illustrate the need of final drive and state the various considerations. (08 Marks)
b. Name the types of reduction drives, discuss any one type. (08 Marks)
- 6 a. Discuss the purpose of PTO shafts in tractors. (08 Marks)
b. Name the basic types of transmissions and explain any one type with figure. (08 Marks)
- 7 a. Explain the functions of following in hydraulic system of earthmoving vehicle
i) Pumps ii) Valves. (08 Marks)
b. Draw and show the component of depth and draft control system. (08 Marks)
- 8 a. List out the types of pumps used in hydraulic system and explain any type with figure. (08 Marks)
b. Discuss the function of flow control valves and direction central valves. (08 Marks)
- 9 a. Explain the type of maintenance and their application. (08 Marks)
b. Discuss the various safety measures for earthmoving vehicle. (08 Marks)
- 10 a. Discuss the methods of selecting the earth moving equipments. (08 Marks)
b. Explain the factors affecting the productivity of a bulldozer. (08 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.