

Code: CE6T5

III B.Tech - II Semester – Regular Examinations – May 2015

**TRANSPORTATION ENGINEERING - II
(CIVIL ENGINEERING)**

Duration: 3 hours

Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1. a) Compare railway and highway transportation in detail. 7 M

b) What do you understand by a railway track and a permanent way? Mention the requirements of an ideal permanent way. 7 M

2. a) Describe the functions and requirements of rails in a railway track. 7 M

b) Discuss the different types of sleepers in use and state relative merits and demerits. 7 M

3. a) Explain the necessity of gradients. Discuss all the types of gradients and also grade compensation. 7 M

b) Discuss various types of crossings in use on Indian Railways. 7 M

4. a) Describe the factors that influence the selection of site for a Railway station. 7 M
- b) Define interlocking and explain the principle of interlocking. 7 M
5. a) Name the different characteristics of aircrafts. How do they affect the planning and design of airports? 7 M
- b) Enumerate the various factors which affect selection of site for an airport. 7 M
6. a) Write about the classification of obstructions. 7 M
- b) Explain how the basic runway length is determined and discuss about corrections for elevation, temperature and gradient. 7 M
7. a) Write about the various types of water transportation. 7 M
- b) Discuss the advantages and disadvantages of water transportation. 7 M
8. a) What is fender? Describe its various forms. 7 M
- b) Define dredging. Explain the reasons for its adoption. 7 M