

Code: CE6T5

III B.Tech - II Semester – Regular Examinations – April 2016

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

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) Explain the classification of Indian Railways based on traffic and speed criteria. 7 M
b) Explain coning of wheels with neat sketches. 7 M
2. a) Write the different types of rail joints with neat sketches wherever required. 7 M
b) What are the functions of ballast? Write the requirements of ideal ballast. 7 M
3. a) Briefly discuss the types of gradients used in railways. 7 M
b) Draw the line diagram of a left hand turnout and label its parts. 7 M
4. a) What are the factors to be considered for site selection of railway station? 7 M

- b) Classify the signals used in railways depending on operational, functional and locational characteristics. 7 M
5. a) Write short notes on air-craft characteristics. 7 M
- b) Draw neat sketches explaining the different airport layouts 7 M
6. a) Write short notes on aircraft obstructions. 7 M
- b) Write the step-by-step procedure for runway design. 7 M
7. a) What are the types of water transportation? 7 M
- b) Discuss the economics of water transportation. 7 M
8. a) Write the differences between harbour and port. 7 M
- b) Provide a neat sketch of a typical light-house and discuss its function. 7 M