B.Tech. Degree Examination

Civil Engineering
VII SEMESTER

TRANSPORTATION ENGINEERING-II

(Effective from the admitted batch 2008–09)

Time: 3 Hours
Max.Marks: 60

Instructions:
Each Unit carries 12 marks.
Answer all units choosing one question from each unit.
All parts of the unit must be answered in one place only.
Figures in the right hand margin indicate marks allotted.

UNIT-I
1. a) Discuss the role played by railways in industrial and economic progress of a nation 6
b) Write an essay on the historical development of Indian railways 6

OR

2. What is a permanent way? Draw a typical cross section of a permanent way. Discuss in detail the basic functions of various components 12

UNIT-II
3. a) What is the necessity of welding the rails? How the welding of rails is carried out 6
b) What is creep? What are the possible causes of creep? What are the effects of creep? 6

OR

4. What is the necessity of geometric design of a railway track? Enumerate the various features of design of a railway track 12

UNIT-III
5. Enumerate the various types of track junctions in use. Discuss the suitability of each under different conditions 12

OR

6. What are the objects of signaling? Explain in different types of signals used in the station-yards 12

UNIT-IV
7. a) Explain the classifications of ports 6
b) What are the components of ports and explain the functions of ports 6

OR

8. Write short notes on the following:
a) Navigational aids 4
b) Wind 4
c) Waves & currents 4

UNIT-V
9. a) Briefly discuss the layout of airports 6
b) What are the components and functions of an aircraft? 6

OR

10. Write short note on the following:
a) Wind rose diagram 4
b) Runway Design 4
c) Airport site Selection 4