

R07**Code: R7320106**

B.Tech III Year II Semester (R07) Supplementary Examinations December/January 2015/2016

TRANSPORTATION ENGINEERING

(Civil Engineering)

(For 2008 regular admitted batch only)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions

All questions carry equal marks

- 1 What are obligatory points? How do they influence the road alignment? With the help of neat sketches explain about various obligatory points.
- 2 (a) What is centrifugal ratio? Explain its importance in ensuring safety on horizontal curves.
(b) Explain the various methods by means of which super elevation can be provided on a highway at a horizontal curve.
- 3 (a) What are the objectives and scope of Traffic Engineering? Discuss.
(b) What are the road user characteristics that influence the traffic on roads? Explain.
- 4 (a) What are the advantages and disadvantages of traffic signals? Discuss.
(b) Explain the IRC method of traffic signal design.
- 5 What is traffic rotary? What are its advantages and limitations, in particular reference to traffic conditions in India?
- 6 What do understand by a railway track and a permanent way? Mention the requirements of an Ideal permanent way.
- 7 (a) Explain the necessity of widening of gauge on curves.
(b) If the wheel base of a moving vehicle is 4.12 m, the degree of the curve is 5° and flanges project 3.2 cm below the top of rail, determine extra width required on curve.
- 8 What is a wind rose diagram? What is its utility? What are its types? Explain each type.
