

Code :R5320106

R5

III B.Tech II Semester(R05) Supplementary Examinations, April/May 2011
TRANSPORTATION ENGINEERING
(Civil Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

1. (a) What are the policies and goals of Third Road Development plan?
(b) Discuss the stages of the engineering surveys for locating a new highway.
2. (a) Discuss the various factors to be considered in deciding the sight distance at intersections.
(b) The radius of a horizontal curve is 400m, the total pavement width at a curve is 7.6m and the superelevation is 0.07. Design the transition curve length for a speed of 100Kmph. Assume pavement to be rotated about the inner edge.
3. What are the various objectives and applications of spot speed studies?
4. (a) Explain the various types of traffic signals and their functions. How are the signal timings and decided?
(b) Discuss about the shape and colour of the following signs
 - i. Stop sign
 - ii. Restriction End Sign
 - iii. T-intersection
 - iv. Facility Information Sign.
5. (a) What is the difference between large diameter island (conventional type) and mini - roundabout?
(b) Write basic principles of design of a mini-roundabout with a neat sketch.
6. Sketch the principal types of rail sections used on Indian railways. On what criteria are the rail sections designed and on what basis are they chosen for different sections of railway lines?
7. (a) What are the advantages of automatic signaling system.
(b) Differentiate in detail between
 - i. Starter and advance starter signals
 - ii. Co-acting and repeater signals.
8. Explain in detail about the effect of Performance requirements imposed by the Government on aircraft manufactures and operators on runway length. Explain in detail about the effect of Performance requirements imposed by the Government on aircraft manufactures and operators on runway length.
