

SIXTH SEMESTER
MID SEMESTER EXAMINATION

B.TECH. [Civil Engineering]
(March 2019)

CE306: TRANSPORTATION ENGINEERING

Time: 1:30 Hours

Max. Marks: 30

Note: Answer all questions. All questions carry equal marks. Assume suitable missing data, if any.

- Q.1 What are the basic requirements of an ideal alignment? Briefly describe various stages of engineering surveys. (2+4)
- Q.2 Draw a typical cross section of highway. Discuss its any four important geometric elements. (2+4)
- Q.3 What are the factors that affect the overtaking sight distance? Design the length of overtaking zone on a double lane national highway having design speed of 100 km/h. (2+4)
- Q.4 What are the functions of transition curves? Design the length of transition curve at a horizontal curve of 230m radius on a double lane national highway passing through rolling terrain for the design speed of 80 km/h. (2+4)
- Q.5 Write short notes on any two of the following: (3+3)
- i) Attainment of Super Elevation
 - ii) Comparison of Flexible and Rigid Pavements
 - iii) Traffic Control Devices