

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech. Summer 2017 - 18 Examination

Semester: 1**Subject Code: 03211104****Subject Name: Geometric Design of Highway****Date: 29/05/2018****Time: 2:00PM TO 04:30PM****Total Marks: 60**

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1A) What are the points which a design engineer has to consider while selecting design standards for a highway? (05)

B) Enlist the classification of urban highways in India and explain any one in brief. (05)

C) What are the main features of Expressways? (05)

Q.2) Answer the following questions. (Attempt any three) (Each five mark) (15)

A) Explain stopping sight distance.

B) Explain the general controls for horizontal alignment.

C) How is the length of transition curve determined?

D) Explain the method for attainment of super-elevation.

Q.3A) What general controls should be kept in view in designing vertical profile of a highway? (07)

B) Explain the importance of camber in highway. (08)

OR

B) Explain the terms (i) Building line (ii) Control line. (08)

Q.4A) What are the advantages of rotary intersections? Explain. (07)

OR

A) Enlist the purposes of channelization and explain any one. (07)

B) Explain the common methods of on-street parking. (08)