

Roll No.

Total No. of Pages : 01

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M.Tech.(Civil Engg.) (Sem.-2)
ADVANCED TRAFFIC ENGINEERING

Subject Code : MTCE-208

M.Code : 74301

Date of Examination : 06-07-22

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE out of EIGHT questions.
2. Each question carries TWENTY marks.

1. What are the different vehicle characteristics which affect the road design? Briefly explain.
2. a) Derive an expression for finding stopping sight distance at levels and at grades.
b) Calculate safe Overtaking sight distance for a highway having a design speed of 100kmph?
3. a) Discuss factors to be considered in deciding sight distance at intersection?
b) Why are over taking zones provided? What is the basis of deciding its length? Draw a neat sketch and show the signs to be installed and their position.
4. a) Explain super elevation. What are the factors on which design of super elevation depends? Explain maximum and minimum super elevation?
b) Explain with neat sketches the methods of eliminating camber and introduction of super elevation?
5. a) Derive expression for finding length of Transition curve on horizontal alignment of highways.
b) Calculate length of Transition Curve for a design speed of 80 kmph at a horizontal curve of radius 300m in a rural area? Assume suitable data.
6. a) What is a traffic rotary? What are its advantages and limitations, in particular reference to traffic?
b) What are the various types of parking facilities designed for traffic needs? Compare kerb parking with off street parking.
7. What are the various types of traffic markings commonly used? What are the uses of each?
8. With neat sketches show various types of traffic signs, classifying them in proper groups.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.