

Total No. of Printed Pages:02

SUBJECT CODE NO:- H-265
FACULTY OF SCIENCE AND TECHNOLOGY
T.E. (Civil)
Transportation Engg.- II
(OLD)

[Time: Three Hours]

[Max. Marks: 80]

- N.B Please check whether you have got the right question paper.
 i) figures to the right indicate full marks
 ii) Question no.1 and 6 are compulsory.
 iii) Solve any two questions from remaining of each section.

Section A

- Q.1 Explain briefly the modified classification of road system in India as per the third twenty year road development plan ,1981-2001. 10
- Q.2 a) What is super elevation? Derive an expression for super elevation. 07
 b) Explain different types of failures in rigid pavements with neat sketch 08
- Q.3 The speed of overtaking and overtaken vehicles are 86kmph and 70kmph, respectively on a two way road .if the acceleration of overtaking vehicle is 0.99 m/sec^2 . 15
 i) Calculate safe overtaking sight distance
 ii) Minimum length of overtaking zone.
 iii) Draw a neat sketch of the overtaking zone showing positions of sign post.
- Q.4 a) Enlist different tests carried out on aggregates. Explain any one in detail 07
 b) What are various types of surveys carried out while designing highways 08
- Q.5 a) Discuss vision 2021. And it's recommendations in detail 07
 b) Explain the total reaction time of driver and the factors on which it depends. 08

Section B

- Q.6 Draw a sketch of flexibly pavement cross section and show component parts. Explain the function and importance of each component of pavement. 10
- Q.7 a) State the functional classes of traffic signs with example. 07
 b) List various excavating machinery used during Highway construction . mention the uses and limitations of any two 08

- Q.8 a) Calculate the equivalent radius of resisting section of 20cm slab . given the radius of contact area of wheel is 15 cm. 07
- b) Discuss the general causes of pavement failure. 08
- Q.9 a) Discuss briefly the importance of highway maintenance. 07
- b) Differentiate between flexible and Rigid pavements. 08
- Q.10 Explain group Index method of Pavement design. What are the limitations of this method 15