

Roll No

CE - 501**B.E. V Semester**

Examination, June 2016

Transportation Engineering - II*Time : Three Hours**Maximum Marks : 70*

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each question are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) Explain the twenty year road plan.
- b) Write down the different modes of highway financing.
- c) What do you understand by super elevation derive an expression for it?
- d) Calculate the overtaking sight distance for one way and two way traffic when the difference in speeds of overtaking and overtaken vehicles is 45kmPH. The speed of overtaking vehicle is 80kmPH and Acceleration of overtaking vehicle is 5 kmPH.

OR

Write down the detail notes on selection of road alignment.

2. a) Explain the term seal coat.
- b) What is wearing coat?
- c) Write down the short notes on radius of relative stiffness.

- d) Draw a sketch of flexible pavement cross section and show the components, also mention function and importance of each component.

OR

Write down the Marshall stability method of bitumen mix design for flexible pavement.

3. a) What do you understand by W.B.M?
- b) Write down the advantage of Traffic-Rotary.
- c) What is the importance of traffic signals?
- d) What are the various causes of failure of flexible pavement?

OR

What is mechanical stabilization of ground? Discuss the different modes of mechanical stabilization.

4. a) Explain the following term:
 - i) Traffic-way
 - ii) Taxi-way
- b) What do you understand by terminal facilities?
- c) Explain the Runway with neat sketch.
- d) What factors are to be considered in site selection of Airport? Explain in detail.

OR

Explain the orientation of runway using Wind Rose diagram.

5. a) What do you understand by Rotating Beacon?
- b) Explain the Precision approach radar.
- c) What are the various runway marking?
- d) Write down in detail approach lighting system.

OR

Write down the detail notes on Taxi-way lighting.
