Total No. of Questions :5] *[Total No. of Printed Pages : 2*

Roll No .....

CE-501

B.E. V Semester

Examination, December 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) Define Camber.
   b) Explain sight distances.
   c) Discuss salient features of Nagpur Road plan.
   d) Derive an expression for finding superelevation on highway.

   OR

   Discuss the classification of Roads in detail.

2. a) Define Tack coat and its functions.
   b) Define WMM and BM.
   c) Discuss advantages and disadvantages of flexible pavements.
   d) Explain briefly CBR method of flexible pavement design.

   OR

   Explain different types of joints provided in rigid pavement.

3. a) Explain channelised and unchannelised intersections.
   b) What is soil stabilization?
   c) Explain briefly the various concept while deciding the design capacity of a road.
   d) What are the various types of parking facilities designed for traffic needs? Compare kerb parking with off-street parking.

   OR

   With neat sketches show various types of traffic signs, classifying them in proper groups.

4. a) What is wind Rose Diagram?
   b) What are the factors to be considered for site selection for airport?
   c) Explain different aircraft characteristics.
   d) Draw a neat cross-section of Taxiway. Explain function of different parts.

   OR

   The length of runway under standard conditions is 1800 m. The airport site has an elevation of 320 m. Its reference temperature is 30.5°C. If the runway is to be constructed with an effective gradient of 0.25% determine the corrected runway length.

5. a) Discuss Conical surfaces.
   b) Discuss functions of Rotating beacon.
   c) Discuss Instrumental landing system.
   d) Explain uses and different features of Runway lighting.

   OR

   What are the design considerations for a taxiway lighting? Explain with neat sketches.

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