

Total No. of Questions :5]

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Roll No

CE - 501

B.E. V Semester

Examination, December 2012

Transportation Engineering - II

Time : Three Hours

Maximum Marks : 70/100

Note: Attempt any five questions. All questions carry equal marks. Assume missing data suitably.

- I. (a) Write in brief about the classification of Highways as per Nagpur plan. 8
(b) What are the different categories of beneficiaries of highway improvements. What are the different modes of highway financing. 12

OR

- (a) What is super elevation, derive an expression for same. 10
(b) Determine the absolute minimum radius and ruling minimum radius for minimum value of super elevation of horizontal curve for a design speed of 50 kmph. 10
- II. (a) Write the method for determine C.B.R value of a soil sample. 10
(b) Write in short on - seal coat, tack coat, prime coat, wearing coat. 10

OR

- (a) Write in brief about the various stress calculations to be considered for cement concrete pavement design. 10

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- (b) Explain the following terms : 10
(i) Modulus of sub grade reaction
(ii) Radius of relative stiffness
(iii) Radius of resisting section

- III. (a) What is mechanical stabilization of ground? Discuss the different modes of mechanical stabilization. 10
(b) What is use of street lighting. Discuss various street lighting systems. 10

OR

- (a) List the various causes of failure of flexible pavement. 10
(b) What are the advantages and disadvantages of traffic signals. 10

- IV. (a) List down the factors which govern the selection of site for airports. 10
(b) Write in short about Runways & Taxi ways 10

OR

- (a) What is turning radius of aircraft and how it affect the runway and taxiway planning. 10
(b) What do you understand by terminal facilities 10

- V. (a) Write in brief about - Taxiway lighting and approach lighting. 10
(b) Write short note 10
(i) Zoning regulations
(ii) Precision approach radar

OR

- (a) By drawing neat figure show various runway markings. 10
(b) Discuss the concept and use of rotating beacon light in airports. 10