Total No. of Questions : 5 Total No. of Printed Pages : 2

EH-201

B.E. V Semester (CGPA)
Civil Engineering Exam. 2014
TRANSPORT ENGINEERING - II

Paper : CE-505

Time Allowed : Three Hours

Maximum Marks : 60

Note : Attempt all the questions. Each question carry equal marks.

Q.1. a) State briefly historic development of Railway bridge. 6

b) Write short notes on : 6

i) IRC Loading

ii) Return wall.

Q.2. a) What are the general principles of design of bridge foundation. 6

b) Write a note on cofierdams 6

Q.3. a) Write a note on various engineering surveys required for tunneling. 6

b) Describes how tunnels are constructed in soft soil. 6

Q.4 a) The following data are related to a horizontal curved portion of a two lane highway

Length of curve = 200 m

Radius of curve = 300 m

Width of pavement = 7.5 m

SSD = 80 m

The set back distance (in meters) required from the centre line of the inner lane of the pavement is? 6

b) If a rotary is provided with an average entry width of 8.4 m, width of weaving section as 14 m and length of the weaving section between channelising islands as 35 m. The crossing traffic and total traffic on the weaving section are 1000 PCU and 2000 PCU per hour respectively. Then find the capacity of rotary. 6

Q.5. Design the pavement section by triaxial test method using following data.

Wheel load = 5100 kg

Radius of contact area = 15 cm

Traffic coefficient, x = 1.5

Rainfall coefficient, y = 0.9

Design deflection, Δ = 0.25 cm

Es = 100 kg/cm²

Eb = 400 kg/cm². 12

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