

B 215

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2005.

Sixth Semester

Civil Engineering

CE 338 — TRANSPORT ENGINEERING — II

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Draw a neat diagram to explain "Resistance due to gradient".
2. What are the disadvantages of coning and how are they rectified?
3. Draw a neat diagram of a "Flat bearing plate".
4. Explain the "Centre-line method" of calculating the angle of crossing.
5. Explain with a neat diagram the layout of a runway of normal take off.
6. How is the turning radius on a taxiway is determined?
7. State the functions of "Tetrapods" with suitable diagram.
8. Write the differences between dry dock and wet dock.
9. Explain the benefits to the generated traffic.
10. What are the effects of "Noise Pollution" generated by traffic?

PART B — (5 × 16 = 80 marks)

11. What are the different types of pollution arising out of traffic, ill effects and the methods to reduce the severity? Explain in detail.
12. (a) What are the causes for the railway accidents and what are the preventive methods that can be adopted? Explain in detail.

Or

- (b) Explain the different types of leads that are to be calculated in the layout of points and crossings. Using any one of the three methods explain how the lead is determined.

13. (a) What are the elements that are required to be considered for the design of runways? Explain the corrections necessary for elevation and temperature.

Or

(b) Explain the factors considered important for the selection of a suitable site for new airports.

14. (a) How are the harbours classified? Explain in detail the salient features of each one of the classification.

Or

(b) What is a Fender? How is it classified? Explain with neat diagrams.

15. (a) Explain the concept of build, operate and transfer of a national highway of 600 km length.

Or

(b) Why economic evaluation of transportation plans is required? What are its objectives? And what are the different costs and benefits?

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