

3723

BOARD DIPLOMA EXAMINATION, (C-09)

OCT/NOV—2013

DCE—SIXTH SEMESTER EXAMINATION

TRANSPORTATION ENGINEERING

Time : 3 hours]

[Total Marks : 80

PART—A

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. Define the terms (a) camber and (b) sight distance.
2. Define bearing capacity and state its importance in foundation design.
3. List the surveys required for fixing the alignment.
4. What are the stages in the construction of cement-concrete roads?
5. Write any three functions of rails.
6. Distinguish between bridge and culvert.

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7. Write any two differences between goods yards and loco yards.
8. Write any three duties of PWI.
9. Define the terms (a) afflux, (b) waterway and (c) freeboard.
10. Distinguish between through bridge and deck bridge.

PART—B

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. (a) Explain briefly how the roads are classified as per IRC.
(b) Explain briefly the textural classification of soils with neat sketch.
12. (a) State any eight controlling factors in an alignment of a road.
(b) Explain briefly about reconnaissance survey.
13. (a) Explain briefly about road intersections with a neat sketch.
(b) State any four purposes of traffic signs.
14. (a) State the different types of bituminous roads.
(b) Explain briefly how the maintenance of bituminous road is carried out.

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- 15.** Explain briefly the method of construction of WBM roads.
- 16.** Draw the neat sketch of right hand turnout and label the important parts.
- 17.** Explain briefly the different types of rail joints.
- 18.** (a) State the eight factors influencing the selection of site of a bridge.
(b) Explain briefly about high-level causeway.
