



C14-C-405

4428

BOARD DIPLOMA EXAMINATION, (C-14)

OCT/NOV—2016

DCE—FOURTH SEMESTER EXAMINATION

TRANSPORTATION ENGINEERING

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

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 (a) width of pavement, (b) gradient and (c) superelevation.
2. Define camber. State any two advantages of providing camber.
3. Define alignment of a road. State any two factors influencing the selection of alignment of a road.
4. Draw neat sketch of an expansion joint in concrete road and explain.
5. State any three advantages of railways.
6. Explain scissors crossing with the help of a sketch.
7. State function of a marshalling yard. State the types of marshalling yards.

- * 8. Define (a) afflux, (b) vertical clearance and (c) free board.
9. State any three factors to be considered for selection of site for a bridge.
10. Define bridge and culvert.

PART—B

10×5=50

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. Explain the components of a road with the help of a neat sketch.
12. Explain the engineering surveys conducted to fix the alignment of a road.
13. (a) State any four functions of traffic signs.
(b) State any three types of traffic signs and give two examples of each type.
14. Explain the construction procedure of a WBM road.
15. Explain the methods of providing surface drainage and subsurface drainage with the help of sketches.
16. State various types of sleepers used in railways. State any three advantages and one disadvantage of any two types of sleepers.
- * 17. Draw neat sketch of a left-hand turnout and label the component parts.
18. Explain a high-level causeway with the help of a sketch.
