



c16-c-404

6427

**BOARD DIPLOMA EXAMINATION, (C-16)
OCT/NOV—2018
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. State the classification of roads as per IRC.
2. Write a short note on wearing course.
- * 3. List the surveys required for fixing the alignment of a road.
4. Briefly write the purpose of highway drainage.
5. Write any three advantages of railways.
6. Draw a neat sketch of a diamond crossing.
7. Briefly write about the passenger yard.
8. State the types of culvert and causeway.

/6427

1

[Contd...

9. Sketch any three types of abutment.
10. Briefly write about approaches to bridge.

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 functions of various components of a road structure with a neat labelled sketch.
12. What are various controlling factors that will influence the alignment of a road in plain and hilly areas?
13. (a) Name and sketch any five types of mandatory sign used to control road traffic.
(b) Sketch cloverleaf interchange and label the parts.
14. Explain in detail the construction procedure of a bituminous penetration macadam full grout including machinery used and material required.
15. Explain in detail various types of joint used in C.C. roads.
16. (a) Mention any five characteristics of a ballast.
(b) Mention any five requirements of an ideal sleeper.
17. Explain in detail various types of track maintenance.
18. State any ten factors influencing the selection of site of a bridge.

★ ★ ★