



c09-c-604

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**BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL—2018
DCE—SIXTH 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 any three functions of IRC.
2. State the three necessities of highway curves.
3. List the engineering surveys required for fixing the alignment of a highway.
4. State the need for joints in cement concrete roads.
5. State the classification of gauges in railways.
6. Draw a neat sketch of a diamond crossing.
7. State any three facilities provided in loco yards.

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8. Distinguish ^{*} between deck bridge and through bridge.
9. State any three types of wing walls.
10. Define the following :
- (a) Economic span
 - (b) Afflux
 - (c) Free board

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 sketch.
12. Define road alignment and mention any eight factors that influence the highway alignment in plain areas.
13. Explain with neat sketches different road junctions.
14. Explain different types of surface and sub-surface road drainage systems on roads.
- * 15. Explain the construction procedure of a WBM road with a sketch.
16. Draw a neat sketch of right-hand turnout and label all component parts.
17. Explain different types of station yards with neat sketches.
18. Mention any ten factors that are considered for selection of a site for bridge.
