



C14-C-405

4428

BOARD DIPLOMA EXAMINATION, (C-14)

OCT / NOV-2017

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. Write three objects of providing a transition curve?
2. Define the following (a) Consolidation (b) Compaction and (c) Permeability
3. What are the different types of markings on roads
4. State the necessity of road drainage
5. Draw the cross-section of Permanent way and name the parts
6. List any three factors to be considered for selection of site for a railway station.
7. What is meant by 'Gauntlet track'? Draw the figure.
8. State any three assumptions that are to be made in deriving the economic span.
9. Define the following terms : (a) High level bridge (b) Culvert and (c) Low level causeway.
10. Distinguish between Deck bridge and Through bridge.

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[Contd...

* **PART - B**

10 × 5 = 50

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

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

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

11. Write the administrative classification of roads as per I.R.C?
12. What are the plans and documents to be prepared for a road project? Briefly explain it briefly.
13. a) Draw a neat sketch of 'Diamond interchange'.
b) What are the points that should be borne in mind while planning and designing road junctions.
14. Write the construction procedure of W.B.M roads.
15. a) Write any four advantages of bituminous roads over water bound macadam road.
b) List the tests on bitumen. Explain the test to determine consistency of bitumen.
16. What are the merits and demerits of concrete sleepers and steel sleepers?
17. Explain different types of yards with neat sketches.
18. What are the factors that govern the selection of site for a bridge construction?

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