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BOARD DIPLOMA EXAMINATION, (C-20)
NOVEMBER/DECEMBER—2022
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 any three types of horizontal curves adopted in roads.
2. Define super elevation. What is the necessity of providing super elevation?
3. List out any three types of soils.
4. State any three factors that influence the highway alignment in plain areas.
- * 5. What are the machineries used in construction of concrete road?
6. List the methods of providing sub-surface drainage.
7. State any three requirements of good sleeper.
8. What are the different types of rails?
9. Define (a) actual nose of crossing (b) theoretical nose of crossing.
10. Draw a neat sketch of locomotive yard and label the components.

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PART—B

8×5=40

- Instructions :** (1) Answer either **(a)** or **(b)** from each questions from Part- B .
(2) Each question carries **eight** marks.
(3) Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.

11. (a) State and explain different types of surveys to be conducted while locating a highway.

(OR)

(b) Explain any four types of road intersections with a neat sketch.

12. (a) Explain the construction of W.B.M road.

(OR)

(b) Explain various types of joints in cement concrete roads.

13. (a) Mention any eight characteristics of good ballast.

(OR)

(b) Explain different types of rails with neat sketches.

14. (a) Draw a neat sketch of left hand turnout and name the parts.

(OR)

(b) Explain different types of crossings in railway track with a neat sketch.

15. (a) Mention any eight factors that are considered for selection of a site for a bridge.

(OR)

(b) Explain various data required for preparation of bridge project.

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PART—C

10

- Instructions :**
- (1) Answer the following question.
 - (2) The question carries **ten** marks.
 - (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

16. Explain various types of traffic signs with neat sketches.

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