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BOARD DIPLOMA EXAMINATION, (C-16)

MAY/JUNE—2023

DCE - FOURTH SEMESTER EXAMINATION

TRANSPORTATION ENGINEERING

Time: 3 Hours Total Marks: 80

PART—A

 $3 \times 10 = 30$

- **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 functions of IRC.
- 2. Define the terms (a) formation width, (b) camber and (c) gradient.
- 3. State any three traffic surveys.
- 4. State the purpose of road drainage.
- 5. Define gauge. State the types of gauges adopted in India.
- 6. State any three factors to be considered for the selection of site for a railway station.
- **7**. Draw a neat sketch of a wayside station.
- 8. State any three factors that influence in the selection of site for a bridge.
- 9. Define the terms (a) waterway, (b) linear waterway and (c) afflux.
- 10. State different types of wing walls.

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- **Instructions:** (1) Answer *any* **five** questions.
 - (2) Each question carries **ten** marks.
 - (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
- Explain the classification of roads as per IRC. 11.
- 12. Define the term road alignment. State any eight factors influencing selection of alignment for a road in plain areas.
- 13. Explain the clover leaf junction with a neat sketch.
- 14. Explain the construction of concrete roads.
- **15.** Explain the maintenance of W.B.M roads.
- State any five requirements of a good sleeper. **16**. (a)
 - State five functions of ballast. (b)
- **17.** State the duties of a permanent way inspector.
- Draw a neat sketch of a slab culvert. 18.

