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BOARD DIPLOMA EXAMINATION, (C-16) JANUARY/FEBRUARY—2022

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. Define camber. State three reasons for providing it.
- **2.** Draw the neat sketch of a road structure.
- **3.** List the different types of traffic signs.
- **4.** Write any three advantages of bitumen roads over WBM roads.
- **5.** Write any three functions of railway sleepers.
- **6.** List the categories of yards in railways.
- **7.** State any three duties of PWI.
- **8.** Differentiate between high level bridge and low level bridge.
- **9.** Write about causeway.
- **10.** Define economic span of a bridge.

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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.
- **11.** Discuss the importance of road development plans in India.
- **12.** State the factors to be considered while fixing the alignment of a road.
- **13.** Explain the various types of grade separations with neat sketches.
- **14.** List the various tests to be conducted on bitumen and explain them.
- **15.** Explain the construction of WBM road.
- **16.** State the characteristics of a good ballast and write its functions.
- **17.** Draw the neat sketch of left turn-out and label its parts.
- **18.** Explain the factors to be considered for the selection of suitable site for a bridge.

