3723

BOARD DIPLOMA EXAMINATION, (C-09) MARCH/APRIL—2021

DCE - SIXTH SEMESTER EXAMINATION

TRANSPORTATION ENGINEERING

Time : 3 hours [Total Marks: 80

PART—A

 $4 \times 5 = 20$

- **Instructions:** (1) Answer any **five** questions.
 - (2) Each question carries **four** marks.
 - (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
 - 1. State the importance of transportation engineering.
 - 2. Mention the classification of roads as per I.R.C.
 - 3. Define the term alignment.
 - 4. State the necessity of road drainage.
 - 5. List out the classification of railway, based on gauges.
 - 6. State the types of turnouts.
 - 7. State the classification of stations.
 - 8. State the classification of bridges.
 - 9. List out any two points that influence the selection of site for a bridge.
 - 10. Define the following terms:
 - (a) Water way
 - (b) Afflux

/3723 1 [Contd... **PART—B** 15×4=60

Instructions: (1) Answer any four questions.

- (2) Each question carries fifteen marks.
- (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
- **11.** Draw a neat sketch of road structure and indicate the different parts.
- **12.** List the factors influencing alignment of a road in plain and hilly area.
- **13.** Discuss about obligatory points (or) control points.
- 14. List out the essential requirements of road drainage system.
- 15. Explain the methods of providing surface drainage system.
- **16.** State the requirements of a good rail.
- **17.** Describe with a neat sketch about the turn-out, left-hand (or) right-hand.
- **18.** What is the role of a civil engineer with respect to bridges?

 $\star\star\star$