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**BOARD DIPLOMA EXAMINATION, (C-16)
SEPTEMBER/OCTOBER - 2020
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.

1. State any three characteristics of road transport.
2. List the data required for the preparation of a highway project.
3. Write a short note on width of pavement.
4. Mention any three purposes why drainage is to be provided.
5. State any three functions of rails.
6. Draw a neat sketch of a loco yard.
7. Briefly write about the goods yard.
8. Define the following :
 - (a) Deck slab bridge
 - (b) Causeway
 - (c) Abutment

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9. Sketch the component parts of a bridge.
10. State any three factors of selection of site for a bridge.

PART—B

10×5=50

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

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

11. Define gradient. Explain in detail the various types of gradients giving the recommended values in different terrains as per IRC.
12. Explain briefly various types of highway surveys or engineering surveys.
13. (a) Name and sketch any five types of road intersections.
(b) Name and sketch any five types of traffic islands.
14. Explain in detail the construction procedure of CC roads, including material required, methods of construction and machinery used.
15. Explain in detail along with sketches how the drainage is provided for roads.
16. (a) Mention three advantages and two disadvantages of cast-iron sleepers.
(b) Explain briefly any five types of ballast.
17. Explain in detail any two types of railway yards along with sketches.
18. Explain in detail any two types of culverts along with neat sketches.
