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C16-C-404

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BOARD DIPLOMA EXAMINATION, (C-16)

JUNE/JULY—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. Define (a) camber and (b) super elevation.
2. State the classification of Roads as per IRC.
3. State the importance of traffic census.
4. What are machinery used for Water Bound Macadam Road?
5. Draw the cross-section of permanent way and label the parts.
6. State any three maintenance operations carried out in maintenance of railway track.
7. Classify the Indian Railways stations according to the functional characteristics.
8. Mention the component parts of a bridge.
9. Define the terms (a) Economic span, (b) Afflux and (c) Free board.
10. State the functions of Abutments.

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PART—B

10×5=50

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. State and explain different types of horizontal and vertical curves adopted in roads.
12. Describe briefly the various types of surveys for fixing of highway alignment.
13. Explain various types of road intersections with sketches.
14. Explain the methods of providing surface and sub-surface drainage with sketches.
15. Describe the procedure for construction of bituminous penetration macadam road.
16. Explain the pre-stressed concrete sleepers with a neat sketch and also mention the advantages and disadvantages.
17. Explain the various types of yards with neat sketches.
18. Define cause way and explain various types of cause ways with a neat sketch.

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