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C09-C-604

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BOARD DIPLOMA EXAMINATION, (C-09)

JUNE—2019

DCE—SIXTH 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 gradient and list three types of road gradient.

2. Distinguish between sight distance and stopping distance.

3. What are the road signs? State the classification.

4. Distinguish between rigid pavement and flexible pavements.

5. State the advantages of Railway.

6. List any four factors to be considered for selection of site for a railway station.

7. State any three duties of permanent way inspector.

8. Distinguish between the culvert and cause way.

9. List any four factors that affect the depth of scour at a bridge site.

10. Write any four general features of a bridge and their function.

PART—B

10×5=50

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

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

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer

11. *(a)* State the functions of IRC

(b) State the classification of roads as per IRC

12. *(a)* Write any six objectives of traffic engineering.

(b) Mention the surveys required for fixing of alignment.

13. *(a)* What is grade separation? State any three types of common interchanges.

(b) Draw a neat sketch of diamond crossing.

14. *(a)* State the advantages of cement concrete roads.

(b) Explain the method of construction of cement concrete road.

15. *(a)* State necessity of road drainage.

(b) State the essential requirements of good drainage system.

16. *(a)* State requirements of good ballast

(b) Explain different types of rail joints with sketches

17. Explain the different types of yards with neat sketches.

18. *(a)* List out any four factors influencing selection of alignment for a bridge.

(b) Explain the various types of culverts.

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