

4428

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL-2019

DCE - FOURTH SEMESTER EXAMINATION

TRANSPORTATION ENGINEERING

Time: 3 Hours

Max.Marks : 80

PART-A

10x3=30M

Instructions: 1) Answer all questions. Each question carries THREE marks.
2) Answers should be brief and straight to the point and shall not exceed five simple sentences.

- 1) Define the terms:
 - a) Camber b) Super elevation c) Gradient
- 2) Write the objectives of compaction.
- 3) Define traffic volume and traffic density.
- 4) State any three requirements of good highway of drainage system?
- 5) Illustrate with a neat sketch – coning of wheels?
- 6) Write any three duties of PWI.
- 7) Distinguish between station and yard?
- 8) List the conditions under which large span bridges are preferred.
- 9) Differentiate between culvert and causeway.
- 10) What are the functions of an abutment of a bridge?

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PART-B

5x10=50M

Instructions: 1) Answer any five questions. Each question carries 10marks
2) The answers should be comprehensive and the criteria for valuation is the content but not the length of the answer.

- 11) a) Discuss the necessity of curves in a highway design. [5m]
b) List the various modes of transportation of soil and Explain them. [5m]
- 12) a) What is the purpose of origin and destination survey? [4m]
b) Explain the classification of Road junctions? [6m]
- 13) Explain the engineering surveys before a highway alignment is finalized in a highway project?
- 14) Explain the construction procedure of a WBM Road? [10m]
15. Explain the following coats that are applied in bituminous roads :
a) Prime coat b) Tack coat c) Seal coat [3+4+3 m]
- 16) a) Draw a neat sketch of cross section of a permanent way and indicate the parts and mention the purpose of each part? [6m]
b) State the advantages and disadvantages of RCC sleeper [4m]
- 17) Draw a sketch of left hand turn out indicating salient features and their purpose?

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- 18) a) Write the classification of bridges? [5m]
b) Explain the low level causeway with a neat sketch? [5m]

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