C14-C-**405**

4428

BOARD DIPLOMA EXAMINATION, (C-14)

JUNE-2019

DCE - FOURTH SEMESTER EXAMINATION

TRANSPORTATION ENGINEERING

Time: 3 Hours Max.Marks:80

PART-A

10x30=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) How the roads are classified as per I.R.C?

2) Define (a) Ultimate bearing Capacity (b) Net Ultimate bearing Capacity.

3) State any three types of Pavement markings.

4) What are the essential requirements of good drainage system?

5) Write any three functions of Railway Sleepers.

6) Define the terms (a) Actual nose of crossing (b) Throat of Crosssing.

7) Draw the neat sketch of "Cross over".

8) State classification of bridges based on position of bridge floor.

9) Define the terms (a) Free board (b) Vertical Clearance.

10) Draw the neat sketch of "Low level Causeway".

PART-B

5x10= 50M

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

11) Explain the functions of Component parts of Road Structure with a neat Sketch.

12) (a) Explain the Survey Operations to be Performed for a Road Project.
(b) State any four Controlling factors in Alignment of Road. (6+4M)

13) What is meant by Grade Seperators? Draw the neat Sketches of
(a) Rotary Interchange (b) Diamond Interchange. (2+4+4M)

14) Explain the Construction Procedure of Water Bound Macadam roads.

15) Explain
(a) Prime Coat (b) Tack Coat (c) Seal Coat. (4+3+3M)

16) (a) Define (i) Gauge (ii) Sleeper density. (2+2M)
(b) State any six characteristics of good ballast. (6M)

17) (a) Draw the neat Sketch of Right hand Turnout and indicate sailent features. (6M)
(b) Explain Turn Table with a neat sketch. (4M)

18) (a) State any six factors influencing the selection of site for a bridge (6M)
(b) Define economical span and scour depth (2+2M)

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