



C09-C-604

**3723**

**BOARD DIPLOMA EXAMINATION, (C-09)**

MARCH / APRIL - 2019

**DCE - VI 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) Answer should be brief and straight to the point.

- 1 What will happen if there is heavy camber ?
- 2 Define (i) Bearing capacity (ii) Compaction.
- 3 State any three points to be borne in mind while drawing formation line for a proposed highway on L.S sheet.
- 4 Why joints are provided in cement concrete roads ?
- 5 Write any three functions of sleepers.
- 6 Why is maintenance of railway track necessary ?
- 7 State various types of station yards.
- 8 State any four advantages of "through bridge".
- 9 Define : (a) Waterway (b) Afflux
- 10 Distinguish between three kinds of alignment for bridges.

3723 ]

1

[ Contd...

**PART - B****10×5=50**

- Instructions :**
- (1) Answer any **FIVE** questions.
  - (2) Each question carries **TEN** marks.
  - (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11 Draw the typical dimensioned cross section of N. H in embankment with two traffic lanes and mark all its components.
- 12 (a) Draw the sketches of (i) No parking (ii) Steep hill signals.  
(b) Explain the clover leaf junctions with a neat sketch.
- 13 Explain about classification of intersections in highways with the help of neat sketches.
- 14 (a) What are the various types of laying bituminous roads.  
(b) Explain the steps involved in the construction of cement concrete roads.
- 15 (a) State the necessity of road drainage.  
(b) State the essential requirements of drainage system.
- 16 (a) What are characteristics of good ballast ?  
(b) What is a fish Plate ? Explain why it is provided in rail track system ?  
(c) Write any five requirements of a good sleeper.
- 17 (a) Distinguish between points and crossings.  
(b) Draw a neat sketch of a left hand turn out explain briefly.
- 18 (a) Explain with a neat sketch about the details of pipe culvert.  
(b) Distinguish between low level causeway and high level cause way and explain where they are preferred.