



C14-C-405

4428

**BOARD DIPLOMA EXAMINATION, (C-14)
MARCH/APRIL—2018
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. State the important functions of I.R.C.
2. Mention three kinds of road gradient.
3. Why are the traffic islands provided? Draw a neat sketch of traffic island.
4. State the purposes of providing seal coat in bituminous roads.
5. Write three advantages of flat footed rails over other rails.
6. Draw a neat sketch of 'scissors crossover'.
7. Write any three duties of P.W.I.
8. What are the constituent parts of substructure of a bridge?
9. Define (a) linear water way (b) afflux and (c) vertical clearance.
10. Differentiate between 'cut waters' and 'ease waters'.

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[Contd...

PART-B

10×5=50

- Instructions :** (1) Answer *any five* questions
(2) Each questions carries **ten** marks
(3) Answers should be comprehensive and the criterion 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.** Write any ten points that are to be kept in mind in alignment of a road.
- 13.** What are the different types of traffic signs? Explain with two examples each .
- 14.** Explain the construction of a W.B.M road and write any two advantages of it.
- 15.** (a) Briefly explain the flash point test on bitumen.
(b) State different machineries used in construction of bituminous roads.
- 16.** What are the characteristics of good ballast?
- 17.** Draw a neat sketch of right hand turnout and explain the salient features.
- 18.** Explain the high-level causeway with a neat sketch.

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