



c14-c-405

4428

BOARD DIPLOMA EXAMINATION, (C-14)
MARCH/APRIL—2016
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. Define superelevation. State the necessity of providing super-elevation.
2. Explain any three types of horizontal curves adopted in roads.
3. Sketch any three important informatory signs.
4. State the machinery used in the construction of WBM roads.
- * 5. Draw neat sketch of a permanent way and label the components.
6. State any three maintenance operations carried out in daily maintenance of railways.
7. State any three duties of a permanent way inspector.
8. Define (a) economic span, (b) afflux and (c) scour depth.
9. State any three functions of abutment of a bridge.
10. State the formulae for (a) economical span and (b) afflux.

/4428

1

[Contd...

WWW.MANARESULTS.CO.IN

*

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.** Explain IS classification of soils.
- 12.** State any ten factors influencing the selection of alignment of a road.
- 13.** Explain various traffic census/traffic surveys conducted.
- 14.** Explain the construction procedure of a cement concrete road.
- 15.** Explain the construction of bituminous roads by (a) full-grout method and (b) semi-grout method.
- 16.** (a) State any five requirements of a good sleeper.
(b) State any five characteristics of a good ballast.
- 17.** Explain the Marshalling Yard and Loco Yard with neat sketches.
- 18.** Explain a low-level causeway with the help of a neat sketch.
