



c09-c-604

3723

BOARD DIPLOMA EXAMINATION, (C-09)
OCT/NOV—2014
DCE—SIXTH 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. List the types of soil that are categorized as per the soil formation.
2. State the important functions of IRC.
3. Mention the surveys required for fixing alignment.
4. List out the machinery and equipment to be used in the construction of WBM road giving the purpose for which it is used.
5. What is meant by creep of rail?
6. Write any three duties of CPWI.
7. Distinguish between railhead and base in (a) wayside stations and (b) junctions.
8. State any four advantages of through bridge.
9. Explain the terms (a) linear waterway (b) vertical clearance and (c) economical span.

- * 10. Explain three different types of approache.

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. Draw the typical dimensioned cross-section of N-H in embankment with two traffic lanes and mark all its components.
12. (a) State the factors influencing the selection of alignment for a road in plain area.
(b) Explain with sketches the different types of traffic sign.
13. (a) Explain the engineering surveys needed for locating a new highway.
(b) Name and sketch any four types of mandatory sign used to control road traffic.
14. (a) Explain the construction procedure for laying sheet asphalt on an existing concrete road.
(b) Explain how the maintenance of bituminous road is done.
15. Explain the different stages involved in the construction of cement-concrete pavement.
16. (a) State any six functions of ballast.
(b) State the characteristics of good ballast.
17. (a) Draw a typical layout of a locomotive yard. Mention its chief requirements.
(b) Explain the layout of marshalling yard with a neat sketch.
- * 18. (a) What are the factors that govern the selection of ideal site for a bridge?
(b) Explain the different types of pier with sketches.
