

TED (10) – 4012

(REVISION — 2010)

Reg. No.....

Signature

SIXTH SEMESTER DIPLOMA EXAMINATION IN ENGINEERING /
TECHNOLOGY—OCTOBER, 2014

TRANSPORTATION ENGINEERING

(Common to CE, EN and WR)

[Time : 3 hours

(Maximum marks : 100)

PART—A

(Maximum marks : 10)

Marks

I Answer the following questions in one or two sentences. Each question carries 2 marks.

1. Define super elevation.
2. State warning traffic sign with examples.
3. What is meant by creep of rails ?
4. Discuss the terminal area of airport.
5. What is meant by economic span of a bridge ?

(5x2=10)

PART—B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. State the factors to be considered in location of highways in hilly areas.
2. What are the structures required for sub surface drainage system of highways ?
3. What are the advantages and disadvantages of W.B.M. road ?
4. List out any six points that should be considered for providing road junctions.
5. What are the objectives of signalling ?
6. Distinguish between Deck Bridge and through bridge.
7. What are the advantages and disadvantages of water transportation ?

(5x6=30)

PART—C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks)

UNIT – I

- III (a) Distinguish between overtaking sight distance and stopping sight distance with sketches. 7
- (b) Distinguish between road way width and right of way with the help of a neat sketch. 8

OR

- | | Marks |
|---|-------|
| IV (a) What are the objectives of final location survey for road ? | 8 |
| (b) Define the term Super elevation with sketch and write down the advantages of providing Super elevation. | 7 |

UNIT – II

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| V (a) Name and sketch any four types of traffic signs used to control road traffic. | 7 |
| (b) Explain method of construction premixed meccadam roads. | 8 |

OR

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| VI (a) Explain the traffic volume study. | 8 |
| (b) Explain how the maintenance of bituminous road is done. | 7 |

UNIT – III

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| VII (a) Explain coning of wheel with a sketch. | 7 |
| (b) What are the advantages and disadvantages of cast iron sleepers ? | 8 |

OR

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| VIII (a) What are the functions of ballast. | 8 |
| (b) What are the requirements of good rail joint ? | 7 |

UNIT—IV

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| IX (a) Draw the typical cross sections of a tunnel in national highways and explain the advantages of provision of tunnels. | 7 |
| (b) Mention the different classification of road bridges. | 8 |

OR

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| X (a) Explain the components of a typical harbour with sketch. | 8 |
| (b) What are the characteristics of good air field layout ? | 7 |