TED (15/19) – 6014
(Revision – 2015/19)

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Reg.No……..
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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, APRIL – 2024

TRANSPORTATION ENGINEERING

[Maximum Marks : 100] [Time : 3 hours]

PART – A
(Maximum Marks : 10)

Marks

I. Answer **all** questions in one or two sentences. Each question carries 2 marks.

1. List the IRC classification of roads.
2. Define superelevation.
3. Define guage.
4. Differentiate between bridge and culvert.
5. Define right of way. (5x2=10)

PART – B
(Maximum Marks : 30)

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

1. List the recommendations of Jayakar Committee.
2. Explain the different layers of a road section.
3. Explain the importance of drainage in roads.
4. Explain the functions of sleeper.
5. List the objectives of signalling.
6. Explain the classification of harbour based on their function.
7. List the factors affecting airport site selection.

(5x6=30)

PART – C

(Maximum Marks : 60)

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

UNIT – I

III. (a) Explain the different types of sight distances. (7)

(b) Explain the different types of signs used in transportation systems. (8)

OR

IV. (a) Explain the functions of islands in road junctions. (8)

(b) Explain different types of surveys to be carried out for locating highways. (7)

UNIT – II

V. (a) Explain different types of vertical curves. (7)

(b) Describe the construction procedure of an earthern road. (8)

OR

VI. (a) Draw the typical dimensioned cross section of a national highway in embankment with one way traffic lane and mark all components. (7)

(b) Compare flexible pavement and rigid pavement. (8)

UNIT –III

VII. (a) State the importance of railway and explain its classification based on guage. (7)

(b) Explain functions of different components of permanent way. (8)

OR

VIII. (a) Explain interlocking. List the objectives of interlocking. (7)

(b) Discuss different types of rail joints. (8)

UNIT – IV

IX. (a) List the functions of breakwaters and docks. (7)

(b) Explain the different cross sections of a tunnel with neat sketch. (8)

OR

X. (a) Classify bridges based on superstructure. (7)

(b) Explain the components of an airport with a labelled sketch. (8)

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