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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(CE) (2011 Onwards) (Sem.-7,8)
TRANSPORTATION ENGINEERING - II
Subject Code : BTCE-804
M.Code : 71862

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.
4. Assume any data suitably.

SECTION-A**1. Answer briefly :**

- a) First railway line in India was opened between which stations?
- b) What do you mean by tilting of rails?
- c) What is the need of proper geometric design of a track?
- d) What is a turnout?
- e) Give advantages of Maglev train.
- f) Give advantages of A class stations.
- g) What is a wind rose diagram?
- h) What is a holding apron?
- i) What are the various elements of airport lightning?
- j) What are the various types of yards?

SECTION-B

2. Give complete classification of railway line as adopted by Indian railways.
3. Draw neat sketch showing various components parts of a permanent way. Mention the requirements of an ideal permanent way.
4. Discuss the role of International Airport Authority of India for functioning of airports in India?
5. Explain the procedure of orienting the runway.
6. Explain various factors which affect the locations of exit taxiway.

SECTION-C

7. Give classification of signals according to their locations in station yards alongwith suitable sketches.
8. Calculate the maximum permissible speed on a curve of a high speed BG group A route having the following particulars :

degree of the curve = 10; superelevation 80mm, length of transition curve = 120m, maximum speed likely to be sanctioned for the section = 160kmph.
9. Enumerate various factors which you would keep in view while selecting a suitable site for an airport.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.