

Roll No.

Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (CE) (2012 to 2017) (Sem.-7)
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.

SECTION-A

Answer briefly :

1. List various gauges prevailing in India with their gauge widths.
2. What are the functions of rails?
3. Define equilibrium speed.
4. What are the objects of signaling?
5. How are railway stations classified?
6. What do you mean by Tongue rail?
7. What does ICAO and IAAI stand for?
8. What is separation clearance?
9. What are the various groups into which airport markings are divided?
10. Draw sketch of typical lightning of wind direction indicator.

SECTION-B

11. Why is it desirable to have, as far as possible, a uniform gauge for the railway network of a country?
12. What is meant by wear of rails? Categorize the types of rail wear and enumerate the methods by which wear in rails can be measured.
13. Discuss the structure of ICAO.
14. What is a wind rose diagram? What is its utility? What are its types? Explain each type briefly.
15. What do you understand by optimum location of exit taxiway?

SECTION-C

16. Write a detailed note on important statistics of Indian Railways.
17. Calculate the superelevation, maximum permissible speed, and transition length for a 3° curve on a high speed BG section with a maximum sanctioned speed of 110 kmph. Assume the equilibrium speed to be 80 kmph and the booked speed of the goods train to be 50 kmph.
18. Explain the various surveys to be conducted and the data to be collected for airport site selection.

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.