

B.E./B.TECH. Degree Examination, December 2020
Fifth Semester
CE18505-TRANSPORTATION ENGINEERING II
(Regulation 2018)

Time: Three hours

Maximum : 80 Marks

Answer **ALL** questions

PART A - (8 X 2 = 16 marks)

1. As per ICAO recommendations, the speed of cross wind should not exceed:
 - (a) 10 kmph
 - (b) 100 kmph
 - (c) 25 kmph
 - (d) 15 kmph
2. One lunar day is equal to
 - (a) 24 hr
 - (b) 24 hr 15 min
 - (c) 24 hr 50 min
 - (d) 25 hr 15 min
3. In India, most commonly used rail section is:
 - (a) Vignole's rail
 - (b) Bull Headed rail
 - (c) Double Headed rail
 - (d) None of the above
4. In India, Type A railway tracks are having a allowable running speed of:
 - (a) 130 kmph
 - (b) 160 kmph
 - (c) 100 kmph
 - (d) 200 kmph
5. State the purpose of Hangar in an airport.
6. Differentiate port & harbor.
7. Write the disadvantages of 'ballast less tracks'.
8. State the three functions of a Marshaling Yards.

PART B - (4 X16 = 64 marks)

09. (a) (i) Write a short note on 'Dedicate Freight Corridor' in India. **(8)**
- (ii) Appraise the coning of wheels in the context of curve negotiation. **(8)**

(OR)

- (b) (i) Discriminate buckling of track from creeping of track. (8)
(ii) Explain the importance of ballast in the railway track. (8)

10. (a) (i) Distinguish on-track tamping from off-track tamping. (8)
(ii) Explain the concept of 'Hump Yard'. (8)

(OR)

- (b) (i) Explain the various sources of water considered during the design of track drainage system. (8)
(ii) Explain the concept of 'Sand Piling'. (8)

11. (a) Draw a layout of an airport and explain the function of each component in a tabular form. (16)

(OR)

- (b) Calculate Runway Length: (16)
Airport Elevation – R.L. 100
Airport Reference Temperature – 28°C
Basic Runway Length – 600 m
Highest point along length – R.L. 98.2
Lowest Point along length – R.L. 95.2

12. (a) Briefly explain about various types of "breakwaters" in a Harbour. (16)

(OR)

- (b) Briefly explain about "docks" in a Harbour. (16)