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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- 2026

B.Tech-IVth Semester (CE)

COURSE CODE (CREDITS): 18B1WCE634(3) MAX. MARKS: 25

COURSE NAME: Transportation Engineering

COURSE INSTRUCTORS: Dr. Amardeep MAX. TIME: 1Hour 30 Minutes

Note: *(a) All questions are compulsory.*

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q.No	Question	CO	Marks
Q1	Discuss in detail about the different types of signals in railway along with their application.	CO -1	04
Q2	Differentiate between harbour and port. Discuss their types in details.	CO -4	03
Q3.	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 km/h. Assume the equilibrium speed to be 80 km/h and the booked speed of the goods train to be 50 km/h.	CO -2	05
Q4.	Discuss in detail about the different types of transition curve and requirements of an ideal transition curve.	CO -2	05
Q5.	What do you mean by Maximum Permissible Speed on a Curve? Discuss in detail about the specification for different types of curves.	CO -2	03
Q6.	Calculate the maximum permissible speed on a curve of a high speed BG group A route having the following particulars: degree of the curve = 1°, superelevation = 80 mm, length of transition curve = 120 m, maximum speed likely to be sanctioned for the section =160 km/h.	CO -3	05