GALGOTIAS UNIVERSITY

ADMISSION NUMBER												

School of Engineering

B.TECH Civil Engineering
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem VI - G1UA601T - Transportation Engineering II

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Explain the term cant deficiency	K2	(2)
2)	List the different Gauges used in railways.	K1	(3)
3)	Compare the double headed rails and bull headed rails	K2	(4)
4)	Explain the functions of rails in a railway track.	K2	(6)
5)	Identify the requirements of good rails.	K3	(6)
6)	What are the requirements of an ideal rail joint? Illustrate by neat sketches.	K3	(9)
7)	What is the equilibrium cant on a 2° curve on BG if 15 trains, 10 trains, 5 trains and 2 trains are running at speeds of 50 km/h, 50 km/h, 70 km/h and 80 km/h?	K4	(8)
8)	Derive the relationship between super-elevation, Gauge, speed and radius of curve.	K4	(12)

OR

	If a 8° curve track diverges from a main curve of 5° in an opposite direction in the layout of a BG yard, calculate the super-elevation and speed on the branch line, if maximum speed permitted on the main line is 45 km/h.	K4	(12)