GALGOTIAS UNIVERSITY

ADMISSION NUMBER												

School of Engineering

M.Tech Structural Engineering
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem II - G1PC203T - Limit State Design of Steel Structures

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)	CLassify the various types of connections used for connecting the structural members.	K2	(2)
2)	Define the principle rafter in a truss.	K1	(3)
3)	Explain the merits and demerits of welded connection?	K2	(4)
4)	Illustrate the correct orientation of placement of channel section purlins over roof trusses?	K2	(6)
5)	Identify and discuss the key characteristics of Fully restrained (FR) connection.	K3	(6)
6)	Construct equivalent system of forces for the distribution of forces in the fl anges and the web of the beam.	K3	(9)
7)	Classify the types of trusses.	K4	(8)
8)	Analyze the Fabrication of Joints in trusses.	K4	(12)
	OR		
	Analyze the welded framed connections and list their design steps.	K4	(12)