GALGOTIAS UNIVERSITY

ADMISSION NUMBER												

School of Basic Sciences

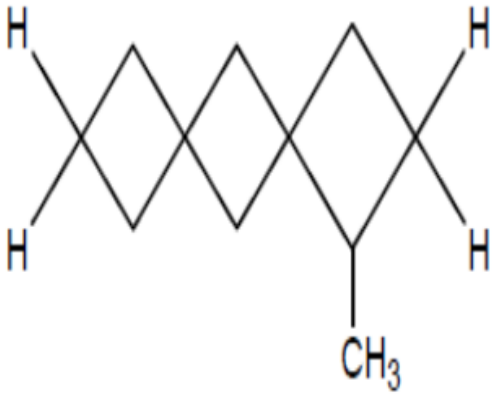
Master of Science in Chemistry
Mid Term Examination - Nov 2023

Duration : 90 Minutes
Max Marks : 50

Sem I - C1PK104B - Stereochemistry and Reaction mechanisms

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)	Summarize the characteristics features of carbocation.	K2	(2)
2)	Why the following compounds is chiral and show its characteristics feature?	K1	(3)



3)	Illustrate threo and erythro diastereomers with suitable example.	K2	(4)
4)	Explain the stereochemistry and characteristics features of allenes.	K2	(6)
5)	Utilize different intermediate for their various applications with suitable reaction	K3	(6)
6)	Apply the different forms including boat and chair in case of axial and equatorial position of methyl group in 1-chloro 4-methylcyclohexane conformation and their stability with proper explanation.	K3	(9)
7)	Compare conformation and configuration with suitable examples.	K4	(8)
8)	Analyze chemical methods for the separation of a racemic mixture with the help of resolving agents and concludes the advantages.	K4	(12)

OR

Conclude the characteristics of the compounds having several chirality centres.