GALGOTIAS UNIVERSITY

ADMISSION NUMBER												

School of Basic Sciences

Master of Science in Chemistry
Semester End Examination - May 2024

Duration : 180 Minutes
Max Marks : 100

Sem IV - MSCH6003 - Chemistry of Natural Products and Retrosynthesis

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)	what are the general properties of alkaloids.	K1	(3)
2)	Show the structure of diadzen and its uses.	K2	(4)
3)	Explain special isoprene rule with example.	K2	(6)
4)	Illustrate the structure of cholesterol.	K3	(6)
5)	Identify the medicinal importance of flavonoids.	K3	(6)
6)	Identify the stereochemistry involved in luteolin.	K3	(9)
7)	Identify the chemical methods for the structure determination of flavonoids.	K3	(9)
8)	Analyze the structure of cholesterol on the basis of different chemical reactions.	K4	(8)
9)	Analyze the biosynthesis of testosterone.	K4	(12)
10)	Explain the synthetic steps for the formation of estrone.	K5	(10)
11)	Explain the Hoffman exhaustive methylation for alkaloid degradation.	K5	(15)
	OR		
	Illustrate the steps involved in the confirmation of the structure of camphoric acid.	K5	(15)
12)	Discuss Biosynthesis of related polyphenols.	K6	(12)
	OR		
	Discuss the Biosynthesis of flavonoids.	K6	(12)