GALGOTIAS UNIVERSITY

ADMISSION NUMBER

School of Medical and Allied Sciences

Master of Pharmacy in Pharmaceutics
Summer Term Examination - Jul /Aug 2024

Duration : 180 Minutes
Max Marks : 75

Sem I - MPC102T - Advanced Organic Chemistry

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)	Show the structure of any drug containing five-membered ring.	K2(2)
2)	Illustrate the structure of diazopropane.	K2(2)
3)	Define nitrenes.	K1(2)
4)	Summarize the role of dicyclohexylcarbodimide.	K2(2)
5)	What do you mean by free radicals?	K1(2)
6)	Show the structure of Mercaptopurine.	K2(2)
7)	What is the structure and use of hydroxychloroquine?	K1(2)
8)	Outline Sharpless asymmetric epoxidation.	K2(2)
9)	Choose the order of stability of free redical.	K1(2)
10)	Summarize the order of stability of carbocation.	K1(2)
11)	Organize the method of preparation of Miconazole and Celecoxib	K3(5)
	OR	
	Identify the method of preparation of Prochlorpherazine and Promazine	K3(5)
12)	Identify the method of preparation of Alprazolam and Triamterene	K3(5)
13)	Examine the strategies for the synthesis of three membered rings.	K4(5)
14)	Create a detailed reaction mechanism for the acid-catalyzed hydration of an alkene involving a carbocation intermediate.	K3(5)
15)	Simplify the basic principles, terminologies and advantages of retro synthesis.	K4(5)
16)	Analyze the term C-X disconnections & C-C disconnections.	K4(5)
	OR	
	Simplify the stereochemistry of Ramipril and Proranolol.	K4(5)
17)	Identify the role of protection for the amino group.	K4(5)
18)	Build the mechanism and synthetic application of uIllman coupling reactions.	K6(10)

19) Determine the stability of carbocation and carbanion with examples. K5(10)

OR

Explain the mechanism and application of Shapiro & Suzuki reactions. K5(10)