Name. _____ **Student Admn. No.: _____**	**Printed Pages:01**

School of Biological and Life Sciences
Summer Term Examination – July - August 2024

[Programme: B.Sc (Micro)] **[Semester: I]** **[Batch: 2023-2024]**

Course Title: Basic Concepts and Aliphatic Hydrocarbons **Course Code: C1UB101T**	**Max Marks: 100** **Time: 3 Hrs.**

Instructions:
1. *All questions are compulsory.*
2. *Assume missing data suitably, if any.*

		K Level	COs	Marks
	SECTION-A (15 Marks) 5 Marks each			
1.	Define hydroboration reaction.	K1	CO1	5
2.	Define Huckel's rule.	K1	CO1	5
3.	Summarise why is pyrrole aromatic?	K2	CO2	5
	SECTION-B (40 Marks) 10 Marks each			
4.	Explain ozonolysis reaction with proper example.	K2	CO2	10
5.	Explain why -CHO, $-NO_2$ and -COOH are meta directing groups	K3	CO3	10
6.	Explain the reaction between benzene, chlorine and $AlCl_3$	K3	CO4	10
7.	Compare the stability order of cyclopropane, cyclobutane and cyclopentane	K3	CO3	10
	SECTION-C (45 Marks) 15 Marks each			
8.	Explain Baeyer strain theory, discuss its success and failures	K4	CO3	15
9.	Justify the reason (a) (a) Why is pyridine aromatic? (b) Why is cyclobutadiene antiaromatic? (c) Why is annulene non-aromatic?	K5	CO4	15
10	Discuss Huckel's rule? Draw the structures of three compounds that follow this rule by giving proper reason.	K6	CO3	15