

Name. _____

Printed Pages:01

Student Admn. No.: _____

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

[Programme: **BSC(H) Zoology 2021-22**] [Semester: **III**] [Batch: _____]

Course Title: Biochemistry and physiology

Max Marks: 100

Course Code: B050201T

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. What are the four major classes of biomolecules? Give the example.	K1	CO1	5
2. What is the basic structure of an amino acid?	K1	CO1	5
3. Describe the structure of Sucrose. How does it differ from Glucose?	K2	CO2	5
SECTION-B (40 Marks)			
10 Marks each			
4. Compare the structure and roles of glycogen and cellulose?	K2	CO2	10
5. Outline the steps involved in glycolysis. What are the key enzymes and Products of this pathway?	K3	CO2	10
6. What are the different types of RNA, and what roles do they play?	K3	CO3	10
7. Explain the concept of protein denaturation. What conditions can cause enaturation?	K3	CO3	10
SECTION-C (45 Marks)			
15 Marks each			
8. Elucidate the biochemical defect in lactose intolerance in human body?	K4	CO4	15
9. What factors influence protein folding? How do chaperone proteins assist in this Process?	K4	CO4	15
10. Elucidate the principle behind SDS-PAGE and its application in protein analysis?	K4	CO5	15