

Name. _____			Printed Pages:01		
Student Admn. No.: _____					
<b>School of Biological and LifeSciences _____</b> <b>Summer Term Examination – July - August 2024</b> <b>[Programme: BSC (H)Biomedical Science 2022-23] [Semester: II ) [Batch:]</b>					
Course Title: Biochemistry and physiology			Max Marks: 100		
Course Code: C2UC201B			Time: 3 Hrs.		
<b>Instructions:</b>	1. All questions are compulsory. 2. Assume missing data suitably, if any.				
			K Level	COs	Marks
<b>SECTION-A (15 Marks)</b>			<b>5 Marks each</b>		
1.	Explain the four levels of protein structure (primary, secondary, tertiary, quaternary).	K1	CO1	5	
2.	Define monosaccharides, disaccharides, and polysaccharides. Provide examples of each.	K1	CO1	5	
3.	Describe the structure of glucose. How does it differ from fructose?	K2	CO2	5	
<b>SECTION-B (40 Marks)</b>			<b>10 Marks each</b>		
4.	Describe the roles of carbohydrates in energy storage and structural support. Compare the 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.	Provide examples of enzymes classification. that use each mechanism?	K3	CO3	10	
7.	Explain the concept of protein denaturation. What conditions can cause denaturation?	K3	CO3	10	
<b>SECTION-C (45 Marks)</b>			<b>15 Marks each</b>		
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	