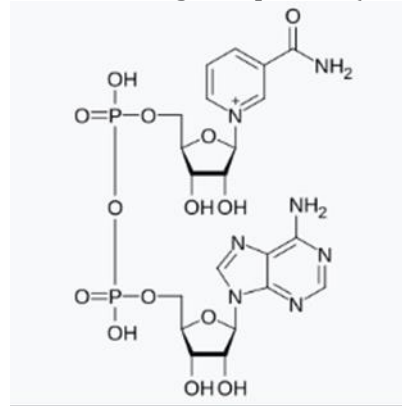




SCHOOL OF BIO SCIENCES AND TECHNOLOGY
CONTINUOUS ASSESSMENT TEST -I
FALL SEMESTER 2025-2026

Programme Name & Branch :B.Tech Biotechnology
Course Code : BBIT202L
Course Name : Biochemistry
Slot :C2 + TC2
Faculty Name(s) :Dr. T. Kalaivani &Dr. C. Shanthy
Class Number(s) : VL2025260100972 & VL2025260100970
Date of Examination :
Exam Duration : 90 minutes Maximum Marks: 50

General instruction(s): Answer All the questions

Q. No	Question	Marks	Course Outcome (CO)	Bloom's Taxonomy (BL)
1.	a) Identify and label the functional groups of the following compound (5 marks) 	10	1	2
	b) Compare ΔG° and ΔG (5 marks)			
2.	Give the structure of water and its properties. Using examples explain how the properties of water make it very useful to the biological system.	10	2	3
3.	a) What are buffers? (5 marks)		2	4
	b) Calculate the ratio of acid and salt needed to prepare the following buffers: 1) 0.1M acetate buffer, 150mL, pH5 (pKa =4.76) 2) 0.1M phosphate buffer, 150 mL, pH 8(pKa =7.2) (5 marks)	10		
4.	a) List the type of linkages (between units a &b and b & c) in the given carbohydrate:	10	3	5



SCHOOL OF BIO SCIENCES AND TECHNOLOGY
CONTINUOUS ASSESSMENT TEST -I
FALL SEMESTER 2025-2026

	<p>(5 marks)</p> <p>b) Draw the cyclic ring structure of L-mannose.. How many stereoisomers will the molecule have? (5 marks)</p>			
5.	<p>a) How the minor structural difference between α and β glucose is related to the difference in structure and function of polymers formed from them? (5 marks)</p> <p>b) Compare glycoproteins and proteoglycans with suitable examples (5 marks)</p>	10	3	3
