



**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	:	C1+TC1	
Faculty Name(s)	:	Dr. E. P. Sabina	
Class Number(s)	:	VL2025260104795	
Date of Examination	:	19.08.2025	
Exam Duration	:	90 minutes	Maximum Marks: 50

Answer all the questions

10x5=50 Marks

Q. No	Question	Marks
1.	Interpret TCA cycle is amphibolic in nature. Explain the reactions of TCA cycle in detail.	10
2.	Classify carbohydrates with flow chart. Explain the structural differences between isomers, enantiomers, and epimers. Provide diagrams to support your answer.	10
3.	Explain in detail the overview of amino acid metabolism with carbohydrate metabolism and explain any 5 amino acid synthesis in detail.	10
4.	What is the significance of the HMP shunt in cellular metabolism? Discuss its role in NADPH generation and ribose sugar synthesis. Give the reactions in detail.	10
5.	Compare glycolysis with gluconeogenesis with reactions. List the reactions of irreversible reactions in detail.	10

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