

**Continuous Assessment Test -II (CAT-II) Fall Semester (2022-23)**

Course Name & code: Biochemistry BBIT202L

Programme Name & Branch: B.Tech Biotechnology

Class Number: VI.2023240101978

Slot: A1+TA1

Faculty Name: Dr.V.Subhashree

Exam Duration: 90 minutes

Maximum Marks:50

**General instruction(s):**

Answer ALL the questions

Any other specific instruction

Draw diagrams and structures wherever necessary

Q.No.	Question	Max Marks	CO	BL
1.	How proteoglycans afford stability to the extracellular matrix? Elucidate with examples? <i>structures of heparin sulphate in blood clotting</i>	10	CO3	L4
2.	What are the structural components of starch? Compare and contrast their structures? <i>how does hydrolysis happens w.r.t no. of branches</i>	10	CO3	L2
3.	Illustrate the reactions that produce more of fructose - 6-phosphate in HMP shunt? <i>2 reac<sup>n</sup>s contribute</i>	10	CO4	L3
4.	Interpret the reactions that generate reduced coenzymes in aerobic fate of pyruvate? <i>start with pyruvate &amp; acetylCoA with structure</i>	10	CO4	L5
5.	Elaborate the important features when glycine is titrated with an alkali?	10	CO5	L6

*±1 pH acts as buffer.*

*histidine is physio-buffer.*

*no line diagrams*