

SHRI RAMSWAROOP MEMORIAL UNIVERSITY

End Semester Examination (2021-22)-Odd Semester

M. Tech (BT) – I Year (I Sem)

Course Name: Biochemistry and Metabolic regulation

Code: MBT1012

Time: 02 Hours

Max Marks: 60

University Roll No.

(To be filled by the Student)

Note: Please read instructions carefully:

- The question paper has 03 sections and it is compulsory to attempt all sections.
- All questions of Section A are compulsory; questions in Section B and C contain choice.

Section A: Very Short Answer type Questions		BL	CLO	Marks (10)
Attempt all the questions.				
1.	What are homopolysaccharides and heteropolysaccharides?	BL1	CLO1	02
2.	Explain the first law of thermodynamics.	BL2	CLO3	02
3.	What is the fate of pyruvate?	BL1	CLO2	02
4.	How are ketone bodies formed?	BL1	CLO2	02
5.	What is the basic structure of purine?	BL1	CLO2	02
Section B: Short Answer Type Questions		BL	CLO	Marks (30)
Attempt any 03 out of 06 questions.				
1.	What are glycolipids and glycoproteins?	BL1	CLO1	10
2.	Explain high energy compounds.	BL2	CLO3	10
3.	Outline the reciprocal regulation with suitable example.	BL4	CLO4	10
4.	Discuss about the transamination reaction.	BL2	CLO2	10
5.	Show the importance of cholesterol.	BL3	CLO4	10
6.	Outline the oxidative branch of pentose phosphate pathway.	BL4	CLO3	10
Section C: Long Answer Type Questions/Case Study		BL	CLO	Marks (20)
Attempt any 01 out of 03 questions.				
1.	Illustrate the glycolytic pathway using suitable reactions in detail.	BL4	CLO2	20
2.	Explain the oxidative phosphorylation in detail.	BL5	CLO3	20
3.	Explain the beta oxidation of fatty acids with suitable reactions.	BL5	CLO4	20