

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: B. TECH.
BRANCH: BIOENGINEERING AND BIOTECHNOLOGY**

**SEMESTER: III
SESSION: MO/2023**

SUBJECT: BE204R1 BIOCHEMISTRY AND ENZYME TECHNOLOGY

TIME: 3 HOURS

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q.1(a)	Explain the significance of Disaccharides with structure of Maltose and sucrose?	[5] 1,2	1
Q.1(b)	Demonstrate the significance of different levels of protein organization?	[5] 3,4	4
Q.2(a)	Evaluate the role of acetyl Co A in metabolic processes?	[5] 4,5	5
Q.2(b)	Explain the different regulatory points in lipid oxidation and synthesis?	[5] 1,2	3
Q.3(a)	Discuss the general pathways of purine metabolism?	[5] 3	3
Q.3(b)	Analyze the different pathways of urea cycle?	[5] 4	5
Q.4(a)	Explore the properties and mechanism of action of the allosteric enzymes?	[5] 4	4
Q.4(b)	Examine the mechanism of enzyme catalysis and role of different variables on it?	[5] 3,5	2
Q.5(a)	Mention the application of different enzymes in leather and textile industries?	[5] 3	2
Q.5(b)	Explore the importance and kinetics evaluation of immobilized enzymes?	[5] 5	4

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