

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION MO/2023)

CLASS: B. TECH.
BRANCH: BIOENGINEERING AND BIOTECHNOLOGY

SEMESTER: III
SESSION: MO/2023

SUBJECT: BE204R1 BIOCHEMISTRY AND ENZYME TECHNOLOGY

TIME: 02 Hours

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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	Mark	CO	BL
Q.1(a) Define the carbohydrates with their empirical formula?	[2]	1	1
Q.1(b) Illustrate the significance of polysaccharides?	[3]	3	4
Q.2(a) Mention the role of proteins in biological membranes?	[2]	1,2	2
Q.2(b) Demonstrate the significance of secondary structure of proteins?	[3]	4,5	5
Q.3(a) Explore the double helical structure of DNA?	[2]	2,3	1,3
Q.3(b) Investigate the amphibolic nature of TCA cycle?	[3]	4	4,5
Q.4(a) Analyze the role of carnitine in activation of fatty acids?	[2]	3,4	3,4
Q.4(b) Explain the mechanism of oxidation of odd carbon containing fatty acids?	[3]	1,3	2,3
Q.5(a) Why derived lipids are important? Explain?	[2]	2	3
Q.5(b) Evaluate the role of enzymes involved in glycolysis and their regulation?	[3]	5	6

:::22/09/2023 E:::