

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION MO/2024)

CLASS: BTECH
BRANCH: BIOTECH

SEMESTER: VII
SESSION: MO/2024

SUBJECT: BE412 PROCESS BIOTECHNOLOGY

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

		CO	BL
Q.1(a)	Define the pattern of growth and important features in an inoculated organism?	[2] 1	1
Q.1(b)	Analyze the different characteristics of microbial products?	[3] 2	3
Q.2(a)	Explain the methods of cell growth measurement?	[2] 2	2
Q.2(b)	Clarify the role of carbon sources on a bacterium of your choice?	[3] 1	1
Q.3(a)	Describe the salient properties of enzyme?	[2] 1	2
Q.3(b)	Define productivity? Explain the parameters to improve the productivity	[3] 2	2
Q.4(a)	State the significance of Michaelis-Menten plot?	[2] 2	4
Q.4(b)	Mention the different parameters influencing the enzyme catalysis?	[3] 1	3
Q.5(a)	Define the active site of an enzyme and explain how the site is involved in catalysis?	[2] 1	1
Q.5(b)	Assume a condition where the active sites of enzyme are not fully occupied. What will happen on catalysis?	[3] 2	4

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