

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2025

M.Tech-II Semester (BT)

COURSE CODE (CREDITS): 14M11BT211 (03)

MAX. MARKS: 15

COURSE NAME: Industrial Biotechnology

COURSE INSTRUCTORS: Dr. Garlapati Vijay Kumar

MAX. TIME: 1 Hour

*Note: (a) All questions are compulsory.*

*(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems*

Q.No	Question	Marks
Q1	<b>Demonstrate</b> the different events that happened for proposing the concepts of "Magic Bullet" and "Fed-batch fermentation" as a part of Historical perspectives under "Industrial Biotechnology" research domain?	3
Q2	<b>Explain</b> the major characteristics of "Secondary metabolites" which make major attention to look after the success stories of "Primary Metabolites"? Emphasize the sequence of events that happened as a part of "Enzyme Inhibitors" success stories under "Industrial Biotechnology"?	3
Q3	<b>Differentiate</b> characteristics of the microbial cell cultivation over plant and mammalian cell cultivations by giving any two examples of Industrial Biotechnological products from each cultivation system?	3
Q4	<b>Summarize</b> the concepts of "Submerged" and "Solid-state" fermentations utilized in the manufacture of biochemical products by comparing characteristics of both the approaches?	3
Q5	<b>Describe</b> about the following one's (a) Enzymes as therapeutic agents (1.5 M) (b) Enzymes usage in "Biobleaching" and "Fruit and wine Industries" (1.5 M)	3