



SCHOOL OF BIOSCIENCES AND TECHNOLOGY
CONTINUOUS ASSESSMENT TEST - II
WINTER SEMESTER 2025-2026

Programme Name & Branch : M.Sc. (Integ.) Biotechnology & Biotechnology
Course Code and Course Name : TBIT213L and FOOD BIOTECHNOLOGY
Slot(s) : G2+TG2
Faculty Name(s) : M. JANAKI RAMAIAH
Class Number(s) : VL2025260505345
Date of Examination : 23-03-2026
Exam Duration : 90 minutes **Maximum Marks: 50**

General instruction(s):

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- Answer All Questions
- M - Max mark; CO – Course Outcome; BL – Blooms Taxonomy Level (1 – Remember, 2 – Understand, 3 – Apply, 4 – Analyse, 5 – Evaluate, 6 – Create)
- Course Outcomes Statements:
 - CO. 1: Interpret and analyze general aspects of food biotechnology
 - CO. 2: Understand principles of microbial fermentation and its biotechnological intervention
 - CO. 3: Demonstrate role of recombinant enzymes in food industry
 - CO. 4: Infer steps involved genetically modified foods, food safety and regulations.
 - CO. 5: Appraise food industrial waste, global food trade, and food laws.

Q. No	Question	M
1.	Discuss the potential strategies involved in the development of designer foods and the possibilities for enhancing their nutritional value and promoting health benefits.	10
2.	Explain nutraceuticals and describe their mechanisms of action in promoting human health and preventing diseases, with suitable examples.	10
3.	a) Illustrate the various molecular techniques used for the detection and identification of food-borne pathogens.	5
	b) Analyze how food-borne pathogens affect food quality, describe the methods used for their identification, and explain their effects on human health.	5
4.	a) Compare the characteristics of different types of wastes with suitable diagrams.	5
	b) Differentiate various ways involved in utilization food waste for potential benefits and explain the constraints involved in the conversion of food waste. What would be the consequence if food waste was not effectively utilized.	5
5.	Evaluate the methods involved in the biotechnological production of value-added products and their applications. Also formulate the potential methods to enhance the value added product production.	10