GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, ODISHA, GUNUPUR
(GIET UNIVERSITY)

B. Tech (Seventh Semester) Examinations, November – 2024

21BBTPE47001 – Food Biotechnology

(Biotechnology)

Time: 3 hrs Maximum: 70 Marks

Answer ALL questions

(The figures in the right hand margin indicate marks)

PART – A **(2 x 5 = 10 Marks)**

Q.1. Answer ***ALL*** questions		CO #	Blooms Level
a.	Why are food additives added to the foods?	CO1	K2
b.	Define Immobilized enzymes	CO2	K1
c.	Define blanching in food processing.	CO3	K1
d.	Name any four rots and their causing agents.	CO4	K2
e.	What are natural emulsions?	CO2	K2

PART – B **(15 x 4 = 60 Marks)**

Answer ***ALL*** the questions		Marks	CO #	Blooms Level
2. a.	Give an account on different classification and biological requirements of proteins.	8	CO1	K1
b.	What are the functional characteristics of chemical additives? Classify the different additives used in food industry, giving one example for each class.	7	CO1	K2
	(OR)			
c.	Discuss the role of carbohydrate, protein, lipid and vitamins in contributing textural characteristics.	8	CO1	K2
d.	Describe the steps involved in food fermentation.	7	CO1	K2
3.a.	Write notes on microbiology of cereals?	8	CO2	K1
b.	Write short notes on immobilized enzyme in food biotechnology.	7	CO2	K1
	(OR)			
c.	How are gases, propellants and wood smoke used in food industry?	8	CO2	K2
d.	How are enzymes useful as processing aids in confectionary and edible oil industry?	7	CO2	K2
4.a.	What are SCPs? Describe in brief the production of mycoprotein for use as food.	8	CO3	K2
b.	What is parboiling of paddy? How does nutritional characteristics change due to parboiling?	7	CO3	K2
	(OR)			
c.	Write an account on food chemicals with suitable examples.	8	CO3	K1
d.	Give an account on Low temperature food preservation methods.	7	CO3	K1
5.a.	Discuss the role of enzymes in the production of maltose.	8	CO4	K2
b.	Discuss about the spoilage of Vegetables and fruits.	7	CO4	K2
	(OR)			
c.	Write short notes on the role of enzymes in beverage production?	8	CO4	K1
d.	Discuss the microbiology of dairy products.	7	CO4	K2

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