CLASS: IMSc / Pre_PhD   SEMESTER : VIII/NA
BRANCH: FOOD TECHNOLOGY   SESSION : SP/2023

SUBJECT: FT422 ENZYMES IN FOOD PROCESSING

TIME: 3 Hours   FULL MARKS: 50

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

			CO	BL
Q.1(a)	Describe the nomenclature of enzymes. Write the properties of enzymes.	[5]	2	2
Q.1(b)	Discuss the Michelis Menten equation of enzyme kinetics. Name the enzyme immobilization	[5]	1	2
Q.2(a)	Explain the major steps of starch conversion.	[5]	2	2
Q.2(b)	Analyze the properties of the enzyme hydrolases. State how bioprotective enzyme act as a preservative.	[5]	2	4,1
Q.3(a)	Discuss effects of bactofugation on cheese making. Explain the functions of amylase and arabinose in fruit juice production?	[5]	2	3
Q.3(b)	Show the industrial classification of enzyme. Show schematically a typical biological process.	[5]	3	3
Q.4(a)	Enumerate the main proteolytic enzymes used in meat processing.	[5]	4	3
Q.4(b)	Elaborate the application of exogenous enzymes during beer production.	[5]	4	3
Q.5(a)	Discuss one chemical method for enzyme Immobilization. Show the classification of living organisms.	[5]	2	3
Q.5(b)	Define the gram-positive bacteria. Indicate the difficulties to elutriation of large quantity of mammalian cells. Illustrate the functions of salt in cheese preparation.	[5]	3	2

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