This question paper contains 3 printed pages]

## NY-156-2023

## FACULTY OF SCIENCE

## M.Sc. (First Year) (First Semester) EXAMINATION

## **NOVEMBER/DECEMBER, 2023**

(New/CBCS Pattern)

**MICROBIOLOGY** 

Paper-MB-103

(Food and Dairy Microbiology)

(Saturday, 9-12-2023)

Time: 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—75

- N.B. := (i) Attempt all questions.
  - (ii) All questions carry equal marks.
  - (iii) Draw neat labelled diagrams wherever necessary.
- Discuss in detail process of soy sauce production w.r.t. microorganisms and biochemical activities involved.

Or

Write in brief on:

(a) Indian fermented food

8

(b) Sauerkraut.

7

P.T.O.

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2.	Describe general types of microbial spoilage of foods. Write a note on fac-	tors
	affecting kind and rate of spoilage.	15
	Or	
	Write short notes on:	
	(a) Traditional methods of food preservation.	8
	(b) Minimal processing technology for preservation of fresh food.	7
3.	Differentiate between foodborne intoxication and foodborne infection	with
	suitable example.	15
	Or	
	Explain the following:	
	(a) Phycotoxin.	8
	(b) HACCP system.	7
4.	Describe molecular diagnostic techniques for detection of foodborne	
	pathogens.	15
	Or	
	Write in brief on:	
	(a) Pros and cons of genetically modified food.	8
	(b) Application of pectinase in food industry.	7

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5. Answer the following (any three):

15

- (a) Explain biochemical activities in vinegar fermentation
- (b) Antioxidants used as food preservative
- (c) Write a short note on role of FDA
- (d) Utilization of Dairy byproduct
- (e) Biosensor.