

**1903000203020071**  
**EXAMINATION FEBRUARY-MARCH 2024**  
**BACHELOR OF SCIENCE (THIRD SEMESTER)**  
**MEDICAL LABORATORY TECHNOLOGY PAPER – V**  
**ENVIRONMENT & FOOD MICROBIOLOGY**

[Time: As Per Schedule ]

[Max. Marks: 50]

**Instructions:**

**1. Fill up strictly the following details on your answer book**

- a. Name of the Examination : **BACHELOR OF SCIENCE (THIRD SEMESTER)**
- b. Name of the Subject : **MEDICAL LABORATORY TECHNOLOGY PAPER – V ENVIRONMENT & FOOD MICROBIOLOGY**
- c. Subject Code No : **1903000203020071**

2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

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Student's Signature

**Q.1 Answer any four of the following :**

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- a) Enlist four characteristics of coliform
- b) What is aerosol? state its size.
- c) Give the microbes involved in the production of soyasauce and beer.
- d) Differentiate Nitrification Vs. Denitrification
- e) Define:
  - i) Water activity
  - ii) Oxidation-Reduction potential

**Q.2 Comment/Justify any two of the following.**

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- a) Justify, "Cheese making is the multistep process".
- b) Functions of microorganisms in soil.
- c) Sedimentation and precipitation techniques are suitable for enumeration of air microflora.

**Q.3 Write an essay on any two the following.**

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- a) Explain various tests routinely performed to analyze the portability of water.
- b) What are the types of aerosol samplers? Discuss impaction on solid surface and centrifugation techniques for enumeration of air-microflora.
- c) Give a detailed account of nitrogen fixation by microorganisms.

**Q.4 Write short notes on any two of the following:**

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- a) Biofertilizers.
- b) Microbiology of solid water treatment.
- c) Number and kinds of organisms in the air.

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