

**2303000501016001-A**  
**EXAMINATION MARCH - APRIL 2024**  
**BACHELOR OF SCIENCE (FIRST SEMESTER) (ATKT)**  
**MAJOR-1-MICROBIOLOGY PAPER - I THEORY**  
**(FUNDAMENTALS OF MICROBIOLOGY) - LEVEL 3**

[Time: As Per Schedule]

[Max. Marks: 35]

**Instructions:**

- 1. Fill up strictly the following details on your answer book**
  - a. Name of the Examination: **BACHELOR OF SCIENCE (FIRST SEMESTER) (ATKT)**
  - b. Name of the Subject: **MAJOR - 1 MICROBIOLOGY PAPER - I THEORY (FUNDAMENTAL OF MICROBIOLOGY) – LEVEL 3**
  - c. Subject Code No: **2303000501016001-A**
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 in short: Any 5**

**5**

- a. Name the kingdoms of Whittaker's five kingdom classification system.
- b. Define a Virus.
- c. State 2 commercial applications of amylase enzymes.
- d. Name the chemicals used in Franz Schulze's experiments for the treatment of air.
- e. Name the scientists who developed the Enrichment technique.
- f. What is agar-agar? State its significance.

**Q.2 Write short notes or brief answers on any 2 of the following:**

**10**

- a. Discuss the principal differences between Prokaryotic and Eukaryotic cells.
- b. Write a short note on fungi.
- c. Explain the taxonomic approach for subdivisions of Microbiology

**Q.3 Answer any 2 of the following:**

**10**

- a. Write a note on agricultural microbiology.
- b. Explain Antony Van Leeuwenhoek and his microscope.
- c. Explain Francesco Redi's experiment.

**Q.4 Explain in short any 2 of the following:**

**10**

- a. Discuss 'Chemotherapy'
- b. Write a note on discovery of animal and plant viruses.
- c. Developments in microbial ecology and soil microbiology.

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