



RAN-2503000505016001

T.Y.B.Sc. Microbiology (Sem. - V) Examination October - 2025
(Paper MB-MJ-501) Applied and Environmental Microbiology

Time: 2 Hours]

[Total Marks: 25

સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book
- (2) Figures to the right indicate full marks of the question.
- (3) Draw neat and labeled diagrams whenever necessary.

Seat No.:

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Student's Signature

- Q-1. Give the specific answers (Any five) 05**
- a. True or False: A damp or humid atmosphere contains fewer organisms than a dry one.
 - b. State the factors that affect amount of water in soil?
 - c. Define: Organic soil
 - d. Which chemical enhances sedimentation in municipal water purification?
 - e. What is potable water?
 - f. Write the full form of TOC.
- Q-2. Explain/comment on any two of the following. 10**
- a. Explain the impingement on solid surface method used for aerosol sampling.
 - b. Outline the agar plate method used for the quantitative examination of soil microorganisms, including its procedure and objections.
 - c. Explain the role of microorganisms present in the air and discuss their impact on environmental and human health.
- Q-3. Answer in short/short note, any 2 of the following. 10**
- a. Membrane filtration technique.
 - b. Anaerobic sludge digestion.
 - c. Impact of viruses in water sources.