



RAN-2403000501016003

F.Y.B.Sc. (Sem. - I) Examination November - 2025

Microbiology (Paper : MB-MJ-101) Fundamentals of Microbiology

Time: 1:30 Hours]

[Total Marks: 38

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 labelled diagrams whenever necessary.

Seat No.:

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Student's Signature

Q.1. Give Specific answers (Any Eight): (08)

- a. Give any two applications of medical microbiology.
- b. What is fermentation?
- c. Who discovered antibiotic Penicillin?
- d. Write any two characteristics of virus.
- e. Which red marine algae is used for extraction of Agar?
- f. What is Methanogen?
- g. Which microbes are used as lactic starter cultures in dairy microbiology?
- h. Who proposed the three-kingdom classification system?
- i. What is chemotherapy?

Q.2. Explain any two of the following: (10)

- a. Write a note on Mycology and Phycology.
- b. Discuss the difference between Eukaryotes and Archaeobacteria based on Woese's Three-Kingdom system.
- c. Explain integrative approach for subdivisions of Microbiology.

Q.3. Explain any two of the following: (10)

- a. Discuss any two applied areas of microbiology.
- b. Explain Pasteur's contribution to fermentation research.
- c. How was the theory of spontaneous generation disproved?

Q.4 Explain any two of the following: (10)

- a. Define Immunology. Explain the development of Immunology.
- b. Describe the role of biotechnology in modern microbiology.
- c. Explain the invention of the streak plate and pour plate technique.