



RAN-2303080603060003

M. Sc. (Sem.-III) Examination October - 2025

Microbiology : (GE: 03) (MB-3005)

Advances in Diagnostic Microbiology

Time: 2 Hours]

[Total Marks: 30

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. State various environmental conditions required for clinically important bacteria for **8**
In-vitro cultivation.

OR

Write a detailed note on: Laboratory diagnosis of human parasites in clinical specimen.

Q.2. Explain PCR cycle in detail. Discuss detection and analysis of PCR product. **7**

OR

Explain species identification using MALDI-TOF MS.

Q.3. Write short notes on any three of the following: **15**

1. Steps and components in nucleic acid hybridization.
2. TS1 Test for bacterial identification.
3. Types of Microarrays.
4. HPLC and susceptibility testing.