


RAN-2403000503016001
B.Sc. (NCF-NEP) (Sem. - III) Examination March - 2026
Microbiology - MB-MJ-301 : Microbial Nutrition And Growth (Set - 4)
Time: 1 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 labelled diagrams whenever necessary.	Seat No.: <table border="1"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> Student's Signature						

Q. 1. Give specific answers. (Any Five)
05

1. Define: Hyperthermophiles with example.
2. What is Continuous culture system?
3. Give two examples of complex media.
4. Explain the term synthetic medium.
5. Define Lag phase for bacterial growth curve.
6. What is binary fission?

Q. 2. Answer in Brief on any two of the following:
10

1. How do solutes and water activity affect microbial growth?
2. Classify the different types of culture media used in microbiology laboratories and describe their characteristics with suitable examples.
3. Name and explain the nutritional types of microorganisms.

Q. 3. Answer in Brief on any two of the following:
10

1. How do bacteria and archaea multiply by binary fission? Explain.
2. Explain how microbial populations can be measured using different counting methods.
3. Write on: Preservation of Microbial Culture.