

RAN-2503000504026001
S.Y.B.Sc. (Sem.- IV) Examination April - 2026
Microbiology : Major - 2 (Paper - IX) MB-MJ-402 - Microbial Ecosystem
Time: 1 Hour]
[Total Marks: 25

સૂચના : / Instructions (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fill up strictly the above details on your answer book	Seat No.: Student's Signature
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- Q.1. Give specific answers. (Any Five) (5)**
- 1) What is anammox reaction?
 - 2) Give one example having insect-microbe mutualistic association.
 - 3) Define: Amensalism
 - 4) What do you mean by denitrification?
 - 5) What is Phyllosphere?
 - 6) State the composition of lignin. Give one microbe degrading lignin.
- Q.2. Explain/Comment on any two of the following. (Any Two) (10)**
- 1) Elaborate the sulphur cycle in detail.
 - 2) Write a note on parasitism through explaining lichen as an example.
 - 3) Commensalism in microorganisms with suitable examples.
- Q.3. Explain/Comment on any two of the following. (Any Two) (10)**
- 1) Describe the colonization process of Arbuscular mycorrhizae.
 - 2) What are the techniques used to study the aquatic environments?
 - 3) Explain in detail the atmospheric nitrogen fixation by *Rhizobia*.