



RAN-7025

B.Sc. Microbiology Sem-IV Examination

March / April - 2019

MB 10 : Microbial Ecology (OLD)

Time: 2 Hours]

[Total Marks: 50

સૂચના : / Instructions

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of signs on your answer book

Name of the Examination:

B.Sc. Microbiology Sem-IV

Name of the Subject :

MB 10 : Microbial Ecology (OLD)

Subject Code No.: 7 0 2 5

Seat No.:

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Student's Signature

Instruction:

1. Figures to the right indicate full marks of the question.
2. Draw neat and labelled diagrams whenever necessary.

Q.1 Give specific answers.

12

- a. Differentiate: Nitrification Vs Denitrification.
- b. Define phytoplankton with its importance.
- c. What are flavonoid inducer molecules? How do they differ from Nod factors?
- d. State the advantages provided by AM to their plant hosts.
- e. Give any two examples of positive microbial interaction with their definitions.
- f. What does it mean by microbial interaction? State its importance.

Q.2 Explain/comment on any two of the following.

12

- a. Nitrification is a good example of commensalistic relationship.
- b. Rhizobia share a healthy relationship with their plant host.
- c. The microbial communities within salt marsh sediments are very dynamic.

Q3. Discuss any two of the following. 16

- a. Explain the microbial adaptations in marine and fresh water environments.
- b. Draw and describe carbon cycle.
- c. Define Mutualism. Explain in detail the rumen ecosystem.

Q.4 Write short notes on any two of the following. 10

- a. Phosphorous cycle
 - b. *Agrobacterium* and its host relationship
 - c. HAB
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