

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Sc.(Agriculture) (Sem.-2)
ELEMENTARY MICROBIOLOGY**

Subject Code : BSAG-201

M.Code : 72356

Date of Examination : 05-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt **ANY FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt **ANY TWO** questions.

SECTION-A

1. Write a short note on the following :

- a) Define "*Growth*".
- b) Write short note on phosphate solubilizing microorganisms.
- c) Write short note on composting.
- d) Why plants cannot directly utilize the atmospheric nitrogen?
- e) What are Mushrooms?
- f) Write short note on viroid.
- g) What is Denitrification?
- h) Write short note on Transduction.
- i) Give a brief account of biopesticides.
- j) Give a concise account of food preservation.

SECTION-B

2. Discuss various types of plant-microbes interactions.
3. Briefly explain bacterial growth curve.
4. Differentiate between edible and poisonous mushroom.
5. Discuss biological nitrogen fixation.
6. Discuss the lysogenic life cycle of bacteriophages.

SECTION-C

7. Explain genetic recombination in bacteria.
8. What are Algae? Mention their salient features and describe their mechanism of nutrition.
9. What are Mycorrhizae? Describe the classificatory categories of mycorrhizae in detail with the help of suitable a diagram.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.