Roll No
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Total No. of Pages : 02

Total No. of Questions : 09

# B.Sc. (Hons.) (Agriculture) (Sem.-2) AGRICULTURAL MICROBIOLOGY Subject Code : BSAG-202-19 M.Code : 77663 Date of Examination : 15-12-2022

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 briefly :

- a) Write short note on biopesticides.
- b) Write short note on transformation.
- c) Write short note on bofertilizers.
- d) Why the population of growing bacterial cells enters into a stationary phase after sometime in a batch culture.
- e) Write short note on biodegradation of agro-waste.
- f) What are biofuels?
- g) Define heterocyst.
- h) Define hartignet.
- i) Define rhizospheric effect.
- j) Define F-plasmids.

### **SECTION-B**

- 2. Give brief account of conjugation.
- 3. Describe various nutritional forms of microorganisms.
- 4. Give an account of the structural details of peptidoglycan.
- 5. What are rhizosphere and phyllosphere?
- 6 What is silage?

### **SECTION-C**

- 7. Describe phosphorus and sulphur cycle along with schematic representation.
- 8. What is growth? Give a consolidated account on the influence of various physical factors on growth of microorganisms.
- 9. Describe the different mode of biological nitrogen fixation.

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