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B.Sc. Course (CBCS) Ordinance (Sem-VI)

EXAMINATION MAY 2023

BOTANY - BIOFERTILIZER

[Time: 2 Hours]

[Max. Marks:60]

- Instructions:**
1. All questions are compulsory, however internal choice is available.
 2. Briefly answer sub-questions in Question I and II.
 3. Figure to the right indicates maximum marks to the questions or sub questions.
 4. Draw appropriate labelled diagrams wherever necessary

Q1 Answer **any three** of the following: 12

- 1) What are biofertilizers? State any three limitations of the use of biofertilizers.
- 2) Write a short note on the Rhizobium - root nodule symbiosis
- 3) Briefly describe the techniques of field application of Azotobacter.
- 4) Describe the various types of mycorrhizal associations.
- 5) Write a brief account on the government support and programmes for use of biofertilizers.

Q2 Answer **any three** of the following: 12

- 1) Describe the method of isolation of Azospirillum
- 2) What is organic farming? State any three benefits of organic farming.
- 3) State the advantages and disadvantages of vermicomposting.
- 4) Write a brief note on neem coated urea and its use in agriculture
- 5) Discuss the role of Effective Microorganisms as biofertilizers.

Q3 A) Write a detailed note on Plant Growth Promoting Rhizobacteria 6

OR

A) Justify : Biofertilizers are greatly in demand over chemical fertilizers 6

B) What is Azolla? Discuss the role of Azolla as a biofertilizer

Q4 A) Explain the role of Frankia as a microbial inoculant 6

OR

A) Write a detailed account on the use of blue green algae as biofertilizers 6

B) Discuss the various benefits of mycorrhizae to plants.

- Q5 A) Describe the mass production of phosphate biofertilizers. Add a brief note on its benefits 6

OR

A) What is green manure? State the advantages of green manuring

B) State the standard parameters for quality control of biofertilizers 6