

# Bankura University

## B.Sc 3rd SEMESTER(Program) EXAMINATION, 2021

Subject: BOTANY

Course ID: 31310

Course Code: SPBOT/304/SEC-1

Course Title: Biofertilizer

Full Marks: 40

Time: 2 h

The figures in the margin indicate full marks

Answer all the questions.

### UNIT I

1. Answer *any five* of the following questions: (2X5=10)
- a) Name one symbiotic and one non-symbiotic N<sub>2</sub> fixer.
  - b) What is the importance of *Azolla-Anabaena* association?
  - c) Mention two properties of carrier which is used in carrier based inoculum preparation.
  - d) Name two worm which is used in vermicomposting.
  - e) What is ectomycorrhiza?
  - f) What do you mean by starter culture?
  - g) What is actinorrhizal symbiosis?
  - h) Why green manure is so called ?

### UNIT II

1. Answer *any four* of the following questions: (5X4=20)
- a) Describe the process of application of *Azolla* in rice cultivation.
  - b) Describe the benefits of mycorrhiza in Agriculture as biofertilizer.
  - c) Describe the recycling of bio degradable municipal waste product.
  - d) Describe the carrier based inoculum preparation of *Azotobacter*.
  - e) Describe the isolation process of *Azospirillum*.
  - f) Describe the application of blue green algae (BGA) in rice cultivation.

### UNIT III

3. Answer *any one* of the following questions: (10X1=10)
- a) What is organic fertilizer? Describe the method of BGA production for field application.
  - b) Describe the isolation process of *Rhizobium* for production biofertilizer. How carrier based *Rhizobium* inoculum preparation can be made.