## B. Sc. (Hons.) Botany / Semester: IV

## Title of paper: Biofertilizers (SEC)

**Unique Code: 32163403** 

Duration: 2 Hours + 1 hour Maximum Marks: 38

(Write your University Roll Number, Paper Title and Unique Paper Code on top of the Answer Sheet)

## Attempt any four questions in all. All questions carry equal marks.

- 1. Discuss the role of Microbes as a biofertilizer in detail, with the help of well-labelled diagrams
  (9.5)
- 2. What do you understand by Actinorrhizal symbiosis. How it is different from Mycorrhizal symbiosis? Describe the various methods for isolation and culture of microorganism involved in Actinorrhizal symbiosis. (9.5)
- Describe the characteristic features of *Azospirillum*. With the help of flow chart, describe the methods of isolation and culture for *Azospirillum* from soil. Comment on its advantages as biofertilizer.
- **4.** i) Write short note on Nitrogen fixation. (5.0)
  - ii) Discuss the role of Cyanobacteria in Rice cultivation. (4.5)
- 5. Define VAM and explain different types of plant-mycorrhizal associations? Mention the various applications of AM for the enhanced growth and yield of crops. (9.5)
- 6. What is vermicompost? Describe the any one method and processing of vermicompost. Explain the significance of composting over the chemical fertilizers. (9.5)



This document was created with the Win2PDF "print to PDF" printer available at <a href="http://www.win2pdf.com">http://www.win2pdf.com</a>

This version of Win2PDF 10 is for evaluation and non-commercial use only.

This page will not be added after purchasing Win2PDF.

http://www.win2pdf.com/purchase/