

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. How are Biofertilizer formulations prepared. Add a note on carrier material, shelf-life, quality control?
17. Describe the process of isolation, identification and characterization of Rhizobium for use as fertilizers.
18. Write about isolation and mass cultivation of Azospirillum.
19. Describe the isolation identification of phosphate solubilizing bacteria.
20. Describe the mechanism of Identification isolation and characterization of mycorrhizae.

S.No. 8721

16 SNMEMB 2

(For candidates admitted from 2016–2017 onwards)

UG DEGREE EXAMINATION, NOVEMBER 2022.

Part IV — Microbiology – Non Major/Elective

BIOFERTILIZER TECHNOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — ($10 \times 2 = 20$ marks)

Answer ALL the questions.

Write short notes on.

1. Biofertilizer development centres.
2. Marketing of biofertilizers
3. Field application of Rhizobium.
4. Benefits of cyanobacteria.
5. Mass cultivation of Azospirillum.
6. Characterization of Azotobacter.

7. Benefits of phosphate solubilizing bacteria.
8. Formulation of phosphate solubilizers.
9. Benefits of mycorrhizae
10. What is Arbuscular mycorrhizae?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) How are biofertilizers applied in fields.
Explain its standards.

Or

- (b) How is quality control maintained for biofertilizer production and application?
12. (a) Write about the formulation and benefits of Rhizobium biofertilizer.

Or

- (b) Explain the features and benefits and applications of Frankia.

13. (a) Write about formulation and field application of Azospirillum

Or

- (b) Give an account on formulation and field application of Azotobacter.

14. (a) Write about field application of Phosphate solubilizers.

Or

- (b) How are Phosphate solubilizers mass cultivated and stored?

15. (a) How are VAM fungi isolated in Laboratory conditions?

Or

- (b) Write about formulation and field application of mycorrhizae.