

U.G. 3rd Semester Examination - 2021**BOTANY**
[HONOURS]**Course Code : BBOTSEHT 305****Course Title: Biofertilizer**

Full Marks : 50

Time : 2 Hours

The figures in the right-hand margin indicate marks.

Answer all the questions by choosing correct alternative:

2×25=50

1. *Rhizobium* is a taxon of –
 - a) Gram '+ve' soil bacteria.
 - b) Gram '-ve' soil bacteria.
 - c) Both (a) & (b)
 - d) None of the above
2. Which one of the following is use in raising crops in organic farming?
 - a) Resistant varieties
 - b) Manures
 - c) Biofertilizers
 - d) All of the above
3. Which of the following nitrogen fixers is found in rice fields associated with *Azolla*?
 - a) *Tolypothrix*
 - b) *Frankia*
 - c) *Anabaena*
 - d) *Spirulina*
4. Which of the following is used as a biofertilizer for soybean crop?
 - a) *Nostoc*
 - b) *Azospirillum*
 - c) *Rhizobium*
 - d) *Azotobactor*
5. Why is there a need to switch to organic farming?
 - a) Increasing poverty
 - b) Increasing road accidents
 - c) Increasing environmental pollution
 - d) Increasing population
6. Which of the following is not used as a bio-fertilizer?
 - a) Bacteria
 - b) Algae
 - c) Cyanobacteria
 - d) Fungi
7. A free-living bacterium fixing atmospheric nitrogen is
 - a) *Rhizobium*
 - b) *Clostridium*
 - c) *Azotobacter*
 - d) All of them
8. Which of the following is not a free-living nitrogen fixing bacteria?
 - a) *Azotobacter*
 - b) *Clostridium*
 - c) *Klebsiella*
 - d) *Xanthomonas*
9. Presence of which of the following elements is required for nitrogen fixation?
 - a) Phosphorus
 - b) Carbon
 - c) Silver
 - d) Oxygen

[Turn Over]

10. Which is the full form of VAM?

- a) Vesicular - arbuscular mycorrhiza
- b) Venom Azolla mycorrhiza
- c) Venom - arbuscular mycorrhiza
- d) Vesicular - azollae mycorrhiza

11. What are bio-insecticides?

- a) Insects
- b) Living organisms that kill specific insects
- c) Insects that kill other big insects
- d) Fungi

12. Which one is correct?

- a) Legumes fix nitrogen independent of bacteria
- b) Legumes fix nitrogen through bacteria in their roots.
- c) Legumes do not fix nitrogen
- d) Legumes fix nitrogen through bacteria in their leaves.

13. Organic farming does not include -

- a) Chemical fertilizer
- b) Compost and farmyard manures
- c) Crop rotation
- d) Green manures

14. Some blue green algae can be used as biofertilizer as they are –

- a) Surrounded by mucilage
- b) Capable of fixing nitrogen
- c) Photosynthetic
- d) Growing everywhere

15. Which one is green manure/biofertilizer?

- a) Sesbaria
- b) Rice
- c) Oat
- d) Maize

16. *Azolla* is used as biofertilizer, as biofertilizer it has-

- a) *Rhizobium*
- b) *Cyanobacteria*
- c) *Mycorrhiza*
- d) Large quantity of humus

17. Which of the following is a phosphate solubilizing bacteria

- a) *E. Coli*
- b) *Lactobacillus* sp
- c) *Ganoderma* sp
- d) *Bacillus polymyxa*

18. A green manure is –

- a) Maize
- b) Sesbania
- c) Rice
- d) Sorghum

19. Biofertilizers -
- a) Retain soil fertility
 - b) Kill Pests
 - c) Prevent pest growth
 - d) All of these
20. Green manure enhances plant field by
- a) 15-25%
 - b) 30-50%
 - c) 60-70%
 - d) 5-10%
21. The biofertilizer present in the roots of legume is –
- a) *Azospirillum*
 - b) *Rhizobium*
 - c) *Anabaena*
 - d) All of the above
22. A biofertilizer involving a pteridophyte host is –
- a) *Azotobacter*
 - b) *Clostridium*
 - c) *Anabaena*
 - d) *Rhizobium*
23. Anabaena belongs to the following family :
- a) Nostocaceae
 - b) Chlorophyceae
 - c) Rhodophyceae
 - d) Bacillariophyceae
24. Heterocysts are found in following alga :
- a) *Anabaena*
 - b) *Spirulina*
 - c) *Mucor*
 - d) None of the above
25. What is the full form of AM
- a) Arbascular mycorrhiza
 - b) Ascicular mycorrhiza
 - c) Antibody mycorrhiza
 - d) Aerobic mycorrhiza