

Reg. No. :

Name :

First Semester M.Sc. Degree Examination, August 2021

Botany

BO 211 : PHYCOLOGY, MYCOLOGY AND PLANT PATHOLOGY

(2013 – 2018 Admission)

Time : 3 Hours

Max. Marks : 75

Instruction: Draw diagrams and illustrate with examples wherever necessary.

I. Answer the following questions.

1. Give the name of an alga having heterotrichous thallus.
2. In which fungal group do we find dolipore septum?
3. Give the names of two algae which are used as food by humans.
4. How do the conidia of *Alternaria* appear?
5. Give one example for an alga with siphonous thallus.
6. What are benthic Algae?
7. Which class of Algae does *Sphacelaria* belong to?
8. Many species Geaster are known commonly as 'earthstars'. Why?
9. How does yellow vein mosaic disease in Okra transmitted?
10. Give one example for a natural pesticide.

(10 × 1 = 10 Marks)

P.T.O.



II. Answer the following questions in **not** more than **50** words.

11. (a) What is systemic acquired resistance?

OR

(b) Explain the cause and symptoms of the disease, powdery mildew of rubber.

12. (a) Describe the general characters of the division *Myxomycota*.

OR

(b) Distinguish between Dikaryous and Diploids.

13. (a) What is the uniqueness in the learning of nematode.

OR

(b) Compare and contrast between prokaryotes and mesokaryotes.

14. (a) Write an account on the secondary metabolites produced by fungi which used as antibiotics.

OR

(b) What are the symptoms of false smut in Rice?

15. (a) Justify the need of plant quarantine measures?

OR

(b) Write a note on the cause, symptoms and control of the rhizome rot of ginger.

(5 × 2 = 10 Marks)



III. Answer the following questions in **not** more than **150** words.

16. (a) Explain how *Pilobolus* completes its life cycle with the help of grazing animals.

OR

- (b) Describe the reproduction methods found in Deuteromycetes.

17. (a) Name the fruiting bodies of ascomycetes. What is the distinguishing character of each?

OR

- (b) How does *Fusarium* reproduce?

18. (a) What is biological control? Give examples for bio-control agents.

OR

- (b) What is disease triangle? Add a note on the significance of the disease triangle.

19. (a) Write an account on the sexual reproduction and alternation of generation in *Ulva*.

OR

- (b) Explain the thallus structure of *Bulbochaete*. Draw suitable diagrams.

20. (a) Describe the cause, spread and symptoms of quick wilt of pepper.

OR

- (b) Write a critical note on Phycomycetes.

(5 × 5 = 25 Marks)



IV. Answer the following questions in **not** more than **250** words.

21. (a) Write an outline of classification of fungi by Ainsworth; point out the main criteria used for the classification and the key characters considered.

OR

- (b) Write an essay on various classes of lichens giving the general characters of each. Add a note on the ecological significance of lichens.

22. (a) Write an essay on the economic importance of Algae, citing suitable examples.

OR

- (b) Quoting appropriate examples, describe the diversity in the thallus organization in algae.

23. (a) Describe the cause, symptoms and management of white rust of sweet potato and red rot of sugarcane.

OR

- (b) 'Successful establishment of a pathogen in a plant depends upon the interaction between the host and parasite, leading to the development of disease symptoms'. Explain.

(3 × 10 = 30 Marks)

