

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Second Semester B.Sc Botany Degree Examination, April 2023

BBT2B02 – Microbiology, Mycology, Lichenology and Plant Pathology
(2022 Admission onwards)

Time: 2 hours

Max. Marks : 60

SECTION A

(Answer all questions, each question carries 2 marks. Ceiling: 20 Marks)

1. Explain SCP.
2. Write an account on the structure of bacteriophages.
3. Give a short note on the bacterial growth curve.
4. What is a clamp connection?
5. Describe the asexual reproduction of *Aspergillus*.
6. Write a note on mycorrhiza.
7. Write a short note on any two fungal databases.
8. Explain the role of lichen in soil formation.
9. Name any two edible lichens.
10. What is Crop Pest Surveillance System?
11. Differentiate between systemic and contact fungicides.
12. Define biological control. Name any one biocontrol agent.

SECTION B

(Answer all questions, each question carries 5 marks. Ceiling: 30 Marks)

13. Give an account on the multiplication of plant viruses.
14. Describe the industrial applications of microorganisms.
15. Briefly explain the methods of genetic recombination in bacteria.
16. Give the general characteristics of Zygomycotina and Mastogomycotina.
17. Briefly explain the life cycle of *Pythium*.
18. Write an account of the structure and reproduction of lichens.
19. Write the pathogen, symptoms and disease management of Citrus canker and Quick wilt of Pepper.

SECTION B

(Answer any one question, each question carries 10 marks)

20. Describe the life cycle of *Puccinia* with help of suitable illustrations.
21. Write an account on the classification and ultrastructure of bacteria.

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Second Semester B.Sc Degree Examination, April 2023

BBT2C02 – Cryptogams, Gymnosperms & Plant Pathology

(2022 Admission onwards)

Time: 2 hours

Max. Marks : 60

SECTION A

(Answer all questions, each question carries 2 marks. Ceiling: 20 Marks)

1. Distinguish photoautotrophic and chemoautotrophic bacteria.
2. Write an account on the pycnidial stage of Puccinia.
3. Define heterocyst and its functions.
4. Describe the structure of megasporophyll in *Cycas*.
5. Write a note on resurrection plant with examples
6. What are the symptoms of Citrus canker?
7. Briefly explain the external morphology of *Sargassum* thallus
8. What do you mean by biological control?
9. Describe the thallus structure of *Usnea*.
10. Distinguish between scalariform and lateral conjugation.
11. What are trichoblasts?
12. Describe the structure of sporophyte in *Riccia*.

SECTION B

(Answer all questions, each question carries 5 marks. Ceiling: 30 Marks)

13. Describe the structure of a bacteriophage
14. Write down the economic importance of lichens
15. Compare the important features of Ascomycotina and Basidiomycotina
16. Give a general account of Virus.
17. Write the causative organism, symptoms and control measures of Blast of Paddy
18. Describe the life history of *Selaginella*.
19. Give an account on post fertilization changes in *Polysiphonia*.

SECTION C(Answer any one question, each question carries 10 marks. $1 \times 10 = 10$ Marks)

20. Describe the structure and reproduction in Bacteria
21. Give an account of structure and life history of *Puccinia*