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Reg. No. : .....

Name : .....

Third Semester B.Sc. Degree Examination, January 2023.

First Degree Programme under CBCSS

Botany

Core Course

BO 1341 – MICROBIOLOGY, PHYCOLOGY, MYCOLOGY, LICHENOLOGY AND PLANT PATHOLOGY

(2019 Admission onwards)

Time : 3 Hours Max. Marks : 80

SECTION – A

Answer **all** questions in a word, one or two sentences. Each question carries **1** mark

1. Define atrichous
2. A beneficial bacteria
3. Episomes
4. What is Carragenin?
5. Name the organism causing red tide.
6. Black mould
7. Name a plant with persistent calyx
8. Botanical name of Jack fruit
9. Phytolexins
10. Bordeaux mixture

(10 × 1 = 10 Marks)

P.T.O.

SECTION – B

Answer **eight** of the following. Each question carries **2** marks.

11. Give the composition of bacterial cell wall.
12. What are bacteriophages?
13. Name the pigments in Cyanophyceae.
14. What area Pyrenoids?
15. What are Synzoospores?
16. What is Frustule?
17. Plakea
18. Cystocarp of *Gracilaria*
19. Unique feature of fungal cell wall.
20. Which fungus is known as Dead Man's Fingers and why?
21. What are fairy rings?
22. What are Fungi Imperfecti?
23. What are the symptoms of Leaf Mosaic Disease of Tobacco?
24. Name the organisms causing Citrus canker and the disease symptoms.
25. Explain briefly types of flagellum of bacteria.
26. Give an account of bacterial staining.

(8 × 2 = 16 Marks)

SECTION – C

Answer **any six** of the following questions. Each question carries **4** marks.

27. Comment on soil microbes.
28. Describe spoilage of food.
29. Briefly explain waste water treatment technique.
30. Describe dwarf males.

31. Give an account of salient features of Phaeophyceae.

32. Describe the life cycle of *Polysiphonia*.

33. Economic importance of algae.

34. Briefly explain the structure of *Saccaromyces*.

35. Explain the morphology and reproduction *Agaricus*.

36. Which are the different types of lichens based on growth? Explain.

37. What are the symptoms and control measures taken for Root wilt of coconut.

38. Comment on host-parasite interaction.

(6 × 4 = 24 Marks)

SECTION – D

Write an essay on **any two** of the following. Each question carries **15** marks.

39. Describe the reproduction and spore formation in bacteria.

40. Describe the classification of algae based on Fritsch.

41. Explain Sexual reproduction methods in *Chara*.

42. Discuss the economic importance of fungi with examples.

43. Describe in detail the life cycle of *Puccinia*.

44. Briefly explain the fungicides prescribed in syllabus.

(2 × 15 = 30 Marks)
