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N – 2580

Reg. No. :

Name :

Third Semester B.Sc. Degree Examination, March 2022

First Degree Programme Under CBCSS

Botany

Core Course

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

(2014 – 2018 Admission)

Time : 3 Hours

Max. Marks : 80

- I. Write short note on the following. All questions are compulsory. Each carries 1 mark.
1. PPLO
 2. Give examples for two nitrogen fixing microbes
 3. Hormogonia
 4. Cryptostomata
 5. What are stoneworts and why it is so called?
 6. Gonidial layer
 7. What do you mean by diatomaceous earth?
 8. Why deuteromycotina is called fungi imperfecti?
 9. Phytoalexins
 10. Aplanogamy

(10 × 1 = 10 Marks)

P.T.O.

II. Answer briefly, **any eight** of the following. Each carries **2** marks.

11. Elucidate the structure of TMV.
12. Write a note on the cell structure of Nostoc.
13. What do you mean by gongrosira stage?
14. Give an account on the sex organs of Chara.
15. Write a note on the disease cycle of blast disease of paddy.
16. Write a short note on any two fungicides you have studied.
17. Differentiate rusts and smuts.
18. Write a brief account on the economic importance of lichens.
19. Briefly explain the fungal classification put forwarded by Ainsworth.
20. Give an account on soil microorganisms.
21. Differentiate apothecium and perithecium.
22. Write short note on thallus structure of Volvox.

(8 × 2 = 16 Marks)

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

23. Explain the reproduction mechanism of bacteriophages.
24. Describe the range of thallus variation seen in Algae.
25. Explain the sex organs in Vaucheria with the help of labeled diagram.
26. Describe the sexual reproduction in Sargassum.
27. Describe briefly classification of plant diseases based on causative organisms and symptoms.
28. With the help of a labeled diagram, explain the fruiting body of Agaricus.
29. Explain different food preservation methods.
30. Describe the reproduction mechanisms of Usnea.
31. Briefly explain the three patterns of life cycle of Saccharomyces.

(6 × 4 = 24 Marks)

- IV. Write an essay on **any two** of the following. Each carries **15** marks.
32. Write an essay on ultra structure of bacteria and its reproduction mechanisms.
 33. Explain the sexual reproduction of macrandrous and nannandrous species of Oedogonium.
 34. Explain the life cycle of Puccinia.
 35. Describe the life cycle of Polysiphonia.

(2 × 15 = 30 Marks)
