

**2023/FYUG/ODD/SEM/
BOTDSC-102T/038**

**FYUG Odd Semester Exam., 2023
(Held in 2024)**

BOTANY

(1st Semester)

Course No. : BOTDSC-102T

(Phycology and Mycology)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

SECTION—A

Answer ten questions, selecting any two from each

Unit : 2×10=20

UNIT—I

- 1. Point out the pigments found in algae.**
- 2. Write briefly on the role of algae in agriculture.**
- 3. Write the contributions of M.O.P. Iyengar.**

(2)

UNIT—II

4. Write a short note on the morphology of *Chara*.
5. Write a short note on the reserve food materials of Phaeophyta and Rhodophyta.
6. What are unilocular and plurilocular sporangia?

UNIT—III

7. Write two differences between plants and animals.
8. Write a short note on lichen.
9. What do you mean by holocarpic and eukarpic thallus?

UNIT—IV

10. Write a short note on heterothallism.
11. Write briefly on parasexuality.
12. Distinguish between uredospores and teleutospores.

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(Continued)

(3)

UNIT—V

13. Mention two roles of fungi in biotechnology.
14. Name two mycoproteins and their role.
15. Name two fungi used for making organic acids.

SECTION—B

Answer *five* questions, selecting *one* from each

Unit : 10×5=50

UNIT—I

16. Describe Fritsch's system of classification of Algae. Mention the significant contributions of G. M. Smith. 8+2=10
17. Write a detailed account of the cell structure and its components of algae. Describe the various methods of reproduction in algae. 5+5=10

UNIT—II

18. With necessary sketches, describe the thallus structure and asexual reproduction of *Chlamydomonas*. 10
19. Give a detailed account of post-fertilization changes in *Polysiphonia* with suitable diagrams. Add a note on the evolutionary significance of *Prochloron*. 6+4=10

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(Turn Over)

UNIT—III

20. Describe the classification of fungi as proposed by Ainsworth. 10
21. What are mycorrhizae? Describe the various types and significance of mycorrhizal association. 2+4+4=10

UNIT—IV

22. Give the general characteristic, life cycle and classification of black stem rust of wheat caused by *Puccinia*. 10
23. With suitable diagrams give an account on the life cycle and classification of *Saccharomyces*. Add a note on the reproduction of *Penicillium*. 6+4=10

UNIT—V

24. Discuss the application of fungi in food industry. Add a note on Fermentation. 6+4=10
25. Give an account of the process of mushroom cultivation. Name four species of edible mushroom. Add a note on mycotoxins. 6+2+2=10
