

**2023/FYUG/ODD/SEM/
BOTDSM-101T/039**

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

BOTANY

(1st Semester)

Course No. : BOTDSM-101T

(Biodiversity)

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. Write a note on TMV.**
- 2. Draw and label the ultra structure of a bacterial cell.**
- 3. Distinguish between transformation and transduction.**

(2)

UNIT—II

4. Write the contribution of M.O.P. Iyengar.
5. Write a note on globule.
6. Write the main pigment constituents and food reserves of phaeophyta.

UNIT—III

7. Write a note on Teleutospores.
8. Write the significance of Mycorrhiza.
9. Write a short note on Lichen as food and fodder.

UNIT—IV

10. "Bryophyta are known as amphibians of the plant kingdom." Justify.
11. Write the two unique features of Archegoniate.
12. What are antheridiophore and archegoniophore?

24J/477

(Continued)

(3)

UNIT—V

13. Write a note on *Phynia*.
14. Write the angiospermic characters of *Gnetum*.
15. What do you mean by heterospory and seed habit?

SECTION—B

Answer *five* questions, selecting *one* from each
Unit : 10×5=50

UNIT—I

16. Discuss the lysogenic cycle of a bacteriophage. How is it different from lytic cycle? 6+4=10
17. Discuss the vegetative methods of reproduction of bacteria. Write a note on endospores. 6+4=10

UNIT—II

18. Give a general account of the range of thallus structure in algae with suitable examples. Add diagram. 10
19. Give a brief account of Fritsch's classification of algae. 10

24J/477

(Turn Over)

(4)

UNIT—III

20. Discuss the classification of fungi as proposed by Ainsworth. 10
21. Write the systematic position and life cycle of *Rhizopus*. 2+8=10

UNIT—IV

22. Discuss about the evolution of Sporophyte in Bryophytes. Add diagram. 10
23. With a neat diagram, describe the anatomical structure of *Anthoceros*. "*Anthoceros* is a synthetic group in Bryophytes." Justify. 5+5=10

UNIT—V

24. What is stele? Give an illustrated account of different types of stele seen in pteridophytes. 10
25. Write briefly about the economic importance of gymnosperms. "*Ginkgo* is a living fossil." Justify the statement. 5+5=10

★ ★ ★