

**2024/FYUG/ODD/SEM/
BOTDSC-102T/073**

FYUG Odd Semester Exam., 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*

UNIT—I

1. Answer any *two* from the following : $2 \times 2 = 4$
 - (a) State the reserve food materials found in algae.
 - (b) State the cell wall composition found in algae.
 - (c) Write the contributions of F. E. Fritsch.

2. Give a detailed account of the range of thallus structure found in algae. Add a brief note on the types of flagella in algae. $6 + 4 = 10$

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(Turn Over)

(2)

OR

3. Discuss the role of algae in agriculture, biotechnology and industry. 10

UNIT—II

4. Answer any two from the following : $2 \times 2 = 4$
- (a) Write a short note on the reproductive structure in *Oedogonium*.
 - (b) Write a note on the isomorphic alternation of generation.
 - (c) Describe briefly the thallus structure of *Nostoc*.

5. With necessary diagrams, describe the thallus structure and sex organs of *Chara*. $5 + 5 = 10$

OR

6. With necessary diagrams, describe the morphology and reproduction in *Ectocarpus*. $5 + 5 = 10$

UNIT—III

7. Answer any two from the following : $2 \times 2 = 4$
- (a) Define mycorrhiza. Give examples.
 - (b) What do you understand by autotrophic and heterotrophic nutrition?
 - (c) Write the salient features of thallus structure found in fungi.

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(3)

8. Write a detailed account on the cell wall composition of fungi. Add a note on the mode of nutrition in fungi. $6 + 4 = 10$

OR

9. What do you understand by symbiotic association? Discuss the nature of association between algae and fungal partner. Add a note on the reproduction of lichen. $2 + 4 + 4 = 10$

UNIT—IV

10. Answer any two from the following : $2 \times 2 = 4$
- (a) Write a note on the types of fruiting bodies found in fungi.
 - (b) What are the characteristic features of *Saccharomyces*? Mention its economic importance.
 - (c) Write briefly on the basidiocarp of *Agaricus*.

11. Discuss the thallus organization and reproduction in *Rhizopus*. Add a note on the reproduction in *Synchytrium*. $6 + 4 = 10$

OR

12. Give the general characteristics of life cycle and classification of *Ustilago*. 10

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(4)

UNIT—V

13. Answer any *two* from the following : $2 \times 2 = 4$

(a) Name two fungicides used in the control of plant disease.

(b) Name two fungi used in Fermentation.

(c) Name two species of edible mushroom.

14. Discuss the role of fungi in biotechnology.
Add a note on Mycotoxins. $6 + 4 = 10$

OR

15. Discuss the role of fungi in agriculture, medicines and biological control of diseases. 10

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