

**2024/FYUG/ODD/SEM/
BOTDSC-201T/077**

FYUG Odd Semester Exam., 2024

**BOTANY
(3rd Semester)**

Course No. : BOTDSC-201T

(Archegoniate)

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 : 2×2=4
 - (a) What are archegoniates? State the divisions of the group archegoniate.
 - (b) What is archegonium?
 - (c) Write two adaptive features of the members of archegoniate to survive on land.

2. Give an account of the unifying features of archegoniates. 10

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(Turn Over)

(2)

OR

3. Describe the ecological importance of archegoniates, citing suitable examples.

UNIT—II

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

- (a) State the point of resemblance between bryophytes and algae.
- (b) Give two examples of liverworts.
- (c) Write on the types of vegetative reproduction found in bryophytes.

5. Explain the theories with reference to evolution of sporophytes in bryophytes, citing suitable examples. 10

OR

6. Describe the salient features of bryophytes. Explain how bryophytes are adapted to amphibian life. $5 + 5 = 10$

UNIT—III

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

- (a) Why *Anthoceros* is called 'hornwort'?
- (b) State the functions of columella.
- (c) Write the economic uses of peat moss.

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(Continued)

(3)

8. Draw and describe the sporophytes of *Marchantia* and *Anthoceros*. $5 + 5 = 10$

OR

9. Give a comparative account of the gametophytic structures of *Riccia* and *Polytrichum*. $5 + 5 = 10$

UNIT—IV

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

- (a) Why are Pteridophytes called the vascular cryptogams?
- (b) Write a note on *Rhynia*.
- (c) Write about strobilus of *Lycopodium*.

11. Describe the cone structure of *Selaginella* and *Equisetum* with necessary diagrams. $5 + 5 = 10$

OR

12. State the difference between Apogamy and Apospory. Describe the stellar evolution in Pteridophytes. $4 + 6 = 10$

UNIT—V

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

- (a) Why is Ginkgo called as living fossil?
- (b) Write a short note on geological time scale.
- (c) Write a note on fossil flora of India.

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(4)

14. Describe the morphology of male cone of *Cycas* and *Pinus* with necessary diagrams.

5+5=10

OR

15. With suitable diagrams, describe the anatomy of stem and ovule structure in *Gnetum*.

5+5=10

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