

**2025/FYUG/ODD/SEM/
BOTDSC-201T/224**

FYUG Odd Semester Exam., 2025

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 of the following questions :

2×2=4

- (a) What do you mean by gametophyte in archegoniate?
- (b) Write briefly on diplontic type of alternation of generation.
- (c) Write briefly on transition to land habit.

(2)

2. Answer any one of the following questions : 10
- (a) Give an account on the affinities among archegoniates. Describe the ecological importance of archegoniates. 5+5=10
- (b) Describe the alternation of generations in archegoniates with suitable diagrams. 5

UNIT—II

3. Answer any two of the following questions : 2×2=4
- (a) Write a brief note on capsule.
- (b) Give two examples of mosses.
- (c) State the resemblance between bryophytes and pteridophytes. 5

4. Answer any one of the following questions : 10
- (a) Discuss the salient features of vegetative and reproductive characters found in bryophytes. 5+5=10
- (b) Explain the theories with reference to evolution of sporophytes in bryophytes citing suitable examples.

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(3)

UNIT—III

5. Answer any two of the following questions : 2×2=4
- (a) Write two important characters of hepaticopsida.
- (b) Write a short note on sporogonium.
- (c) Write the importance of elaters. 10

6. Answer any one of the following questions : 10
- (a) Draw and describe the sporophytes of *Riccia* and *Pellia*. 5+5=10
- (b) Give a detailed account of the gametophyte structures of *Anthoceros* and *Sphagnum*. 5+5=10

UNIT—IV

7. Answer any two of the following questions : 2×2=4
- (a) Write a brief note on early land plants.
- (b) Write about the strobilus of *Selaginella*.
- (c) Write briefly on the economic importance of pteridophytes.

(Turn Over)

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8. Answer any *one* of the following questions : 10
- (a) Write an illustrated note on heterospory and seed habit with special reference to *Selaginella*. Add a note on apogamy. 6+4=10
- (b) Describe the classification of pteridophytes up to order level giving examples of each order.

UNIT—V

9. Answer any *two* of the following questions : 2×2=4
- (a) Write a short note on pollination in *Pinus*.
- (b) Write a note on the coralloid root of *Cycas*.
- (c) Write a short note on geological timescale.
10. Answer any *one* of the following questions : 1
- (a) Describe the morphology of female cone of *Ginkgo* and *Gnetum* with necessary diagrams.
- (b) Describe the anatomy of pine needle. Write a note on the economic importance of gymnosperms. 5+5=10

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