



**2023/TDC(CBCS)/EVEN/SEM/
BOTHCC-202T/223**

TDC (CBCS) Even Semester Exam., 2023

BOTANY

(Honours)

(2nd Semester)

Course No. : BOTHCC-202T

(Archegoniate)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

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

SECTION—A

Answer any *ten* questions : $2 \times 10 = 20$

1. Write a note on transfer cells.
2. What is heterospory? Give two examples of heterosporous Archegoniate. $1+1=2$
3. What do you understand by 'isomorphic alternation of generations'?



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4. Why are bryophytes called the first non-vascular land plants?
5. State the points of resemblance between bryophytes and algae.
6. Give two examples of thallose bryophytes along with their orders. $1+1=2$
7. Why is *Anthoceros* called 'hornwort'?
8. State the function(s) of columella and elater. $1+1=2$
9. Write the economic uses of 'peat moss'.
10. "Pteridophytes are also called vascular cryptogams." Why?
11. What is ligule? Give two examples of ligulate Lycopsidea. $1+1=2$
12. State Stelar theory.
13. Write four important characters of the order Pteridospermales.
14. What is amber? State its uses. $1+1=2$
15. Write a short note on pollination in *Pinus*.

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SECTION-B

Answer any five questions : $6 \times 5 = 30$

16. Give an account of the unifying features of Archegoniates.
17. Describe the haplo-diplontic and diplontic life cycle patterns (alternation of generations) with reference to pteridophytes and gymnosperms respectively.
18. Explain how bryophytes are adapted for amphibian life.
19. Explain the theory of sterilization with reference to evolution of sporophytes in bryophytes citing suitable examples.
20. Give a comparative account of the gametophytic structures of *Riccia* and *Funaria*.
21. Draw and describe the sporogonium structure of *Anthoceros*. $2+4=6$
22. Describe the cone structure of *Equisetum* with necessary diagrams. $3+3=6$
23. Write a note on Stelar evolution in pteridophytes.
24. Describe the ovule structure of *Gnetum*.
25. Describe the anatomy of pine needle.

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