

Roll.No.

20UPBCT2004

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN  
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)  
Chromepet, Chennai - 600 044.

B.Sc PBPBT - END SEMESTER EXAMINATIONS - NOVEMBER 2025  
SEMESTER - II

**20UPBCT2004 - Bryophytes and Pteridophytes**

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

### Section B

Answer any **SIX** questions ( $6 \times 5 = 30$  Marks)

1. Give five examples of bryophyte genera and their habitats.
2. Compare and contrast non - vascular cryptogams and pteridophytes.
3. How polytrichum leaves are adapted in dry condition?
4. Illustrate lycopodium's life cycle stages and alternation of generations.
5. How lamellae trap moisture and affect gas exchange?
6. List Reimers classification of pteridophytes with defined orders and key characteristics.
7. Write the key differences of Apogamy and Apospory along with the key features.
8. Describe how spores are formed and developed in pteridophytes.

### Section C

Answer any **THREE** questions ( $3 \times 10 = 30$  Marks)

9. How has the classification of bryophytes changed through the various systems proposed by botanists over time?
10. Describe the primary mechanisms involved in the dispersal of spores in Marchantia.
11. Compare and contrast the characteristics of eusporangiate and leptosporangiate spores.
12. Why does the evolution of the stele play a crucial role in plant growth and development?
13. In what ways do spore dispersal strategies differ among Lycopodium, Dicranopteris, and Marsilea?

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