

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 - APRIL 2025

SEMESTER - IV

20UPBCT4007 - Gymnosperms, Paleobotany and Evolution

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

1. Write two characteristics of gymnosperms and Applications.
2. Define the structure, reproduction of *Cycas*.
3. What are the typical conditions necessary for Fossil formation?
4. Briefly describe the importance of Paleobotany.
5. Describe the mechanism of pollen germination in *Cycus*.
6. Summarize Dr. Birbal Sahni's contribution to Paleobotany.
7. Briefly describe the Chemosynthetic theory in origin of life.
8. Define fossilization. Write the flora distribution in India in different Beds.

Section C

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

9. Write the detailed account on distribution of gymnosperms in India.
10. Briefly describe the different type of fossils and importance.
11. Briefly describe the morphology, structure and reproduction of *Gnetum*.
12. Write notes on the following fossils:
a) *Medullosa* b) *Williamsonia sewardiana* c) *Pentoxylon*
13. Write notes on
a) Mutation b) Recombination
c) Adaptation d) Selection
