

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-2023

SEMESTER - IV

20UPBCT4007 - Gymnosperm, Palaeobotany and Evolution

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

1. List the characteristic features of gymnosperms.
2. Describe Compressions and impressions.
3. Give an account of the contributions of Dr. Birbal Sahani.
4. Explain various types of mutation.
5. Describe the female gametophyte of *Cycas* and trace the changes leading to the development of seeds.
6. Prepare short notes on casts, molds and pseudofossil.
7. Prepare short notes on *Williamsonia seawardiana*
8. Compare various sources of variation.

Section C

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

9. Give an account of Pilger and Melchior system of classification of gymnosperms.
10. Mention the angiosperm like characters of *Gnetum* and relate its inclusion in gymnosperm.
11. Define fossil. Give your views on the ideal conditions for fossilization.
12. Prepare an essay on geological time scale.
13. Justify origin of life with particular reference to chemosynthetic theory.
