

October 2025
B.A./B.Sc.
Third Semester
MAJOR – 4
BOTANY
Course Code: BOM 3.21
(Gymnosperms & Palaeobotany)

Total Mark: 50
Time: 2 hours

Pass Mark: 20

I. Answer three questions, taking one from each unit.

UNIT-I

1. Give an account of the distribution of gymnosperms in India. 12
2. Mention the similarities and differences between gymnosperms and angiosperms. 12

UNIT-II

3. Give a general account of the order Coniferales. 12
4. Write a note on each of the following: 6×2=12
 - (a) Structure of *Cycas* ovule
 - (b) Structure of male and female strobili of *Gnetum*

UNIT-III

5. What is geological time scale? Discuss the development and evolution of geological time scale. 4+8=12
6. On what basis was the Earth history divided into units of time. Illustrate on the eras and periods of the geological time scale. 2+10=12

II. Answer any two of the following questions.

7. Describe the general characteristic features of gymnosperms. 7
8. Draw and describe the internal structure of *Pinus* needle. 7

9. Discuss the paleoclimate and geological events that occurred during carboniferous period. 7
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