

FIRST YEAR B.Sc.**PALAEOBOTANY, PTERIDOPHYTES AND GYMNOSPERMS****Unit-1**

Characteristics and broad classification of pteridophyta. Stellar system in Pteridophytes. Geological Time Scale. Types of fossils, process of fossilization. Applied aspects of Palaeobotany. Structure of *Rhynia* and *Williamsonia*.

-10 hours**Unit-2**

Occurrence, structure and life history of *Psilotum*, *Lycopodium* and *Equisetum*.

-10 hours**Unit-3**

Occurrence, structure and life history of *Selaginella* and *Marsilea*. Homospory, heterospory and origin of seed habit.

-10 hours**Unit-4**

General characters, economic importance and broad classification of Gymnosperms. Occurrence, structure of life history of *Cycas*.

-10 hours

Unit-5 Occurrence, structure and life history of *Pinus* and *Ephedra*. Recent advances in conifer somatic embryogenesis.

-10 hours**Note:**

The paper setter is required to set questions of 3 types contained in 3 Sections (**Section A**- 10 questions, **Section B**- 10 questions and **Section C**- 4 questions) from the 5 units of each paper. There will be 10 questions in **Section A** which will be asked from all the 5 units, i.e., 2 questions from each unit. These questions have to be answered in one word or a few words only. Each question will be of half mark. All the questions in **Section A** are compulsory. In **Section B**, 10 questions will be set from the 5 units, i.e., 2 questions from each unit. Students are required to attempt at least 1 question from each unit. Each question will carry 5 marks. The answers of each question should be given in about 250 words. In **Section C** there will be 4 descriptive type questions set from all the 5 units, not more than 1 question from each unit. These questions may also have sub-divisions. The

students are required to answer 2 questions, each in approximately 500 words. Each question will carry 10 marks.

In short, pattern of question paper and distribution of marks for UG classes will be as under:

- **Section A** : 10 questions, 2 questions from each unit, short answer, all questions compulsory. Total marks : **05**
- **Section B**: 10 questions, 2 question from each unit, 5 question to be attempted, at least 1 from each unit, answer approximately in 250 words. Total marks : **25**
- **Section C**: 04 questions (question may have sub-division), not more than 1 question from each unit, descriptive type, answer in about 500 words, 2 questions to be attempted. Total marks : **20**