

M. PHILL/PRE – PH.D. Papre III (Special)
Recent Advances in Bryology and Pteridology

Unit I. **(15)**

- Towards an experimental approach to Bryophyte taxonomy.
- Spore morphology and Bryophyte systematics.
- Regeneration in Bryophytes.
- Photomorphogenesis in Bryophytes.

Unit II. **(15)**

- Ultrastructural studies in Bryophytes.
- Chemical constituents of Bryophytes.
- Conduction in Bryophytes.
- The mineral economy of Bryophytes.

Unit III **(15)**

- Recent contribution in Indian pteridophytes.
- Abnormalities in the life cycle of pteridophytes.
- Cytology and Evolution of Ferns.
- Morphogenic aspects of sporophytes.

Unit IV **(15)**

- Evolution of the stellar system.
- Spore germination and gametophytic initiation.
- Regeneration of gametophyte.
- Bactericidal properties of pteridophytes.

Referances

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Journals

- Indian fern Journal.
- American fern Journal. (www.bioone.org/loi/amfj).
- Phytotaxa. (www.mapress.com/phytotaxa/editor.htm).