



K16P 0457

Reg. No. :

Name :

Second Semester M.Sc. Degree (Regular/Supplementary/Improvement)
Examination, March 2016
(2013 and Earlier Admn.)
BOTANY

Paper – B IV : Pteridology and Gymnosperms

Time : 3 Hours

Max. Marks : 70

I. Answer **any two** of the following :

(2×10=20)

- 1) Write on the morphological and anatomical features of equisetales.
- 2) Give an account of the general classification of pteridophytes. Add a note on molecular phylogenetics.
- 3) Explain the life cycle of Ephedra. Add a note on its phylogenetic position.
- 4) Write on the contribution of Indian botanists to gymnosperm studies.

II. Answer **any one** of the following :

(1×10=10)

- 5) Give an account of stelar evolution in pteridophytes.
- 6) Write on the distribution of gymnosperms in the past and present in India.

III. Answer **any three** of the following :

(3×5=15)

- 7) Pteridophytes as ecological indicators.
- 8) Edible pteridophytes
- 9) Evolution of sorus
- 10) Pentoxylon
- 11) Fossilization

IV. Answer **any five** of the following :

(5×3=15)

- 12) Gnetum ovule.
- 13) Morphology of Ginkgo Biloba.
- 14) Heterangium
- 15) Suspensors

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K16P 0457



- 16) Geological time table
- 17) Sporocarp
- 18) Types of Sorus
- 19) Sporangiphore.

V. Answer **any five** of the following :

(5×2=10)

- 20) Circinate vernation
- 21) Siphonostele
- 22) Rheophytes
- 23) Endemism
- 24) Aquatic pteridophytes
- 25) Pollen in Gymnosperms
- 26) Gnetum male strobilus
- 27) Glossopteris.