

III Semester B.Sc. Examination, Nov./Dec. 2017

(CBCS) (F+R) (2015-16 and Onwards)

BOTANY – III

Pteridophytes, Paleobotany, Environmental Biology and Phytogeography

Time : 3 Hours

Max. Marks : 70

Instructions : 1) Answer all questions.
2) Draw diagrams and write examples wherever necessary.

PART – A

A. Explain/Define any ten of the following in two or three sentences : (10×2=20)

- 1) What are hanging roots ?
- 2) What is prothallus ?
- 3) Mention the two species of Rhynia.
- 4) What is watershed ?
- 5) Define amphiphloic siphonostele.
- 6) What is a ligule ?
- 7) What is compression ?
- 8) Mention any two differences between Lycopodium and Selaginella.
- 9) Mention any two agents of soil erosion.
- 10) What is social forestry ?
- 11) Mention any 2 adaptations of parasites.
- 12) Mention any four phytogeographical regions of India.



PART-B

B. Write critical notes on any four of the following :

(4x5=20)

- 13) I.S. of rhizome of Psilotum.
- 14) Contributions of Birbal Sahni.
- 15) Cropland ecosystem.
- 16) Paleozoic era.
- 17) L.S. of Strobilus of Lycopodium.
- 18) Petrification.

BMSCW

PART-C

C. Give a comprehensive account of any three of the following :

(3x10=30)

- 19) Role of seed and gene banks in conservation of plant diversity.
- 20) Describe Cycadeoidea.
- 21) Define an ecosystem. Discuss the positive interactions of biotic factors.
- 22) Explain the concept of heterospory and seed habit.
- 23) Explain :
 - a) Wind erosion
 - b) Mechanical methods of soil conservation.