SECTION - C (2 × 20 = 40)

Answer ALL questions.
Each answer should not exceed 1,200 words.
All questions carry equal marks.

15. (a) Enumerate the advanced features seen in male flower of gnetum.

(OR)

(b) Explain the techniques in the study of fossils, acetolysis of spores and exploration of fossil fuels.

16. (a) Economic importance of gymnosperms.

(OR)

(b) Explain the reproduction in osmunda.

Register Number :

Name of the Candidate :

1 7 0 1

M.Sc. DEGREE EXAMINATION, 2009

(BOTANY)

(FIRST YEAR)

(PAPER - III)

130. PTERIDOLOGY, GYMNOSPERMS AND PALEOBOTANY

May] [Time : 3 Hours

Maximum : 100 Marks

SECTION - A (8 × 3 = 24)

Answer ALL questions.
Each answer should not exceed 50 words.

1. Siphonostele.
2. Leptosporangiate sorus.
3. Syangium.
4. Aril.
5. Transfusion tissue.

6. Resin duct.

7. Coal balls.

8. Paleozoic era.

SECTION - B (6 × 6 = 36)

Answer ALL questions.

Each answer should not exceed 300 words.

All questions carry equal marks.

9. (a) Describe the development of syangium in rhyniales.

(OR)

(b) Describe the structure and development of sporocarp of marsilea.

10. (a) Describe the development of microsporangium of araucaria.

(OR)

(b) Explain the anatomy of leaf and stem of araucaria.

11. (a) Write the methodology of fossilization and kinds of fossils.

(OR)

(b) Explain the various techniques of fossil study.

12. (a) Describe the salient features of angiopteris.

(OR)

(b) Write the salient features of osmunda.

13. (a) Manoxylic stem and pycnoxylic stem. - Explain.

(OR)

(b) Write brief note on L.S. of cycas ovule.

14. (a) Compare the male cone of podocarpus with that of gnetum.

(OR)

(b) Write the geological time scale.