

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY & PLANT BIO-TECH.

FIRST SEMESTER – NOVEMBER 2009

B 116 – PTERIDOPHYTES, GYMNOSPERMS AND PALEOBOTNY

Date & Time: 09/11/2009 / 9:00 - 12:00 Dept. No.

Max. : 100 Marks

PART A

Answer **ALL** the questions, each within three or four sentences only (10×2=20)

1. Homospory
2. Sporophyte
3. Sporophyll
4. Annulus
5. Synangium
6. Sorus
7. Diploxylic
8. Dwarf shoot
9. Petrification
10. Altered and unaltered fossils

PART B

Answer any **FIVE** of the following each within one page only. Draw necessary diagrams. (5× 8= 40)

11. Distinguish between eusporangiate and leptosporangiate and type of sporangium development.
12. Write notes on apospory and apogamy.
13. Describe the cone of *Equisetum*.
14. Give an account of the thallus organization in *Psilotum*.
15. Explain the internal structure of *Osmunda* petiole.
16. Discuss the internal of morphological structure of *Pinus* needle.
17. Describe the structure of male cone in *Gnetum*.
18. Write short notes on the types of fossils.

PART C

Answer any **TWO** of the following, each within 3 or 4 pages only. Draw ecessary diagrams. (2×20= 40)

19. Write detailed notes on the types of stele Pteridophytes.
20. Explain the following:
 - a. Gametophyte of *Lycopodium*
 - b. Anatomy of *Lycopodium* stem
21. Describe the external and internal features of reproductive structures in *Cycas*.
22. Discuss the salient features of Gymnosperms.
