



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY**

**SECOND SEMESTER – APRIL 2017**

**PB 2504- PLANT DIVERSITY – IPTERIDO., GYMNO., & PALEOBOTANY**

Date: 04-05-2017  
01:00-04:00

Dept. No.

Max. : 100 Marks

**PART – A**

**(10 x 2 = 20 marks)**

***Answer the following, each within 50 words.***

01. What is heterospory?
02. Distinguish between Eusporangium and Leptosporangium.
03. What is a Synangium?
04. Write notes on *Marsilea* sporocarp.
05. Write any two characters of Cycadales.
06. Mention the concept of Progymnosperms.
07. What are coralloid roots?
08. Write notes on *Pinus* female cone.
09. Who is the 'Father of Indian Paleobotany'?
10. Write a brief note on Compression.

**PART – B**

**(5 x 7 = 35 marks)**

***Answer the following, each within 500 words. Draw diagrams and flow charts wherever necessary.***

- 11a. Outline the classification of Pteridophytes by Reimer.

**(OR)**

- b. Describe the general characters of Pteridophytes.

- 12a. Explain the structure of *Equisetum* cone.

**(OR)**

- b. Write a detailed account on the economic importance of Pteridophytes.

- 13a. Describe the salient features of Bennettitales

**(OR)**

- b. Discuss the affinities and differences of Gymnosperms with other vascular plants.

14a. Describe the internal structure *Cycas* Ovule.

**(OR)**

b. Give an illustrated account of *Pinus* needle.

15a. Explain the structure *Williamsonia*.

**(OR)**

b. Write an account on Geological time scale.

**PART – C**

**(3 x 15 = 45 marks)**

***Answer any three of the following, each within 1200 words. Draw diagrams and flow charts wherever necessary.***

16. Write an account on the stellar system in Pteridophytes.

17. Explain the structure and reproduction of *Lycopodium*.

18. Discuss the general characters of Gymnosperms.

19. Describe the reproduction in *Gnetum*.

20. Write an account on the external and internal structure of *Lepidodendron*.

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