

**Second Year B.Sc., Degree Examination**  
**August / September 2009**  
**Directorate of Correspondence Course**  
**(Fresher)**  
**Botany**  
**Paper - II : Gymnosperms, Paleobotany, Anatomy,**  
**Embryology & Ecology**

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- Note :**
1. Answer all questions
  2. Draw diagrams wherever necessary

**I. Simple answer questions :**

**Answer in a word, phrase or a sentence.**

**10x1=10**

1. What is an apophysis?
2. Explain the function of Aerenchyma tissue.
3. What is endothecium?
4. Give an example for floating hydrophyte.
5. What is an 'impression fossil'?
6. Define cupule.
7. Define xerosere.
8. What is a rhomboid scale?
9. What is an egg apparatus?
10. What is proembryo?

**II. Short answer questions.**

**Answer any FIVE of the following.**

**5x3=15**

11. Explain commensalism.
12. Write the characters of an entomophilous flower.
13. Explain Histogen theory.
14. Write notes on fossilization.
15. Draw a labelled diagram of T.S. of coralloid root of cycas.
16. Write notes on roots of Epiphytes.
17. Explain with neat labelled diagram the ovule of Gnetum.

**III. Medium answer questions.**

5x6=30

**Answer any FIVE of the following**

18. Write notes on the development of male gametophyte.
19. Explain the internal structure of a Dicot leaf.
20. Write notes on types of pollination.
21. Briefly explain any three types of soil erosion.
22. Describe the cones of Pinus.
23. Write notes on classification of meristem based on position.

**IV. Long answer questions.**

**Answer any THREE of the following :**

10x3=30

24. Explain anomalous secondary growth in Dracena stem.
25. Differentiate monocot and dicot root anatomy.
26. Write notes on types of polyembryony and its significance.
27. Describe the sexual reproduction in Cycas with diagrams.
28. List out the edaphic factors which influence the life of an organism.

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