

Second Year B.Sc., Degree Examination
August/September 2010
DIRECTORATE OF CORRESPONDENCE COURSE
BOTANY (Freshers)

**Paper - II: GYMNOSPERMS, PALEOBOTANY,
ANATOMY, EMBRYOLOGY AND ECOLOGY**

Time: 3 hrs]

[Max.Marks: 85

Note:

1. Answer all questions.
2. Draw diagrams wherever necessary.

I. Simple answer question. Answer in a word, Phrase or sentence: 10 X 1 = 10 Marks

1. What is Pavement Tissue?
2. Who coined the term meristem?
3. What is Pith ray?
4. Define Amphivasal vascular bundle.
5. Define Transfusion tissue.
6. What is Stachyospermae?
7. Define the term Ecesis.
8. Give one example for total stem parasite.
9. Who discovered double fertilization?
10. Name the integumented female gametophyte.



II. Short answer question. Answer any FIVE of the following: 5 X 3 = 15 Marks

11. Explain the T.S of Lepidodendron stem.
12. Write three ecological adaptation in Halophytes.
13. Write an account on Glandular hair.
14. Draw a neat labeled diagram of T.S of cycas microsporophyll.
15. What is tetrad? Mention the types.

16. Distinguish between cycas and Gnetum ovule.
17. Write the characteristic features of Ornithophilous flower.

III. Medium answer question. Answer any FIVE of the following: 5 X 6 = 30 Marks

18. What is polyembryony? Explain the causes for polyembryony.
19. Explain T.S of cycas leaf let with a neat labeled diagram.
20. With a neat labeled diagram explain the structure of Dicot leaf.
21. Describe the T.S of Mature anther.
22. Explain Hydrosere.
23. What is Orchid? Explain the morphological adaptations of epiphytic orchids.

IV. Long Answer questions. Answer any THREE of the following. 3 X 10 = 30 Marks

24. Give an detail account of development of female Gametophyte.
25. Justify the statement the order gnetales as advanced Gymnosperm.
26. Give an account of comparison between anomalous secondary growth in stems of Boerhavia and Dracaena.
27. Describe complex permanent Tissues.
28. What is cross pollination? Explain the contrivances for cross pollination.

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