

11. (a) Evolution in Vascular system of Pteridophytes.

Or

(b) Give a detail account of Psilotopsida and its Fossil records.

12. (a) Discuss the evolution among Gnetales.

Or

(b) Give a detail account of classification of Gymnosperms.

(DBOT 02)

M.Sc. (Previous) DEGREE EXAMINATION, MAY 2009.

First Year

Botany

Paper II — SYSTEMATICS OF ANGIOSPERMS AND PLANT ECOLOGY

Time : Three hours

Maximum : 100 marks

SECTION A — (5 × 8 = 40 marks)

Answer any FIVE of the following.

Each question carries 8 marks.

13. Besseyan order relationship.
14. Thorne.
15. Chromosomal structure.
16. Intraspecific ranks.
17. Ecological Niche.
18. Atmospheric Nitrogen fixation.
19. Earth summit.
20. Solar thermal energy.

SECTION B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

21. (a) Discuss Takhtajan's systems of classification and Merits and Demerits.

Or

1. (b) Compare Natural systems of Classification to that of Phylogenetic systems of Classification.

22. (a) Write about the Taxonomic Species Concept.

Or

2. (b) What are the significant evidences of Anatomy in relation to Taxonomy?

23. (a) What are the parameters controlling the Water cycle? Explain hydrological cascade system.

Or

3. (b) Describe the energetic relations of Ecosystems in relation to detritivorous food web.

24. (a) What is Endemism? Give some Endemic plant specie of India with special reference to Western and Eastern ghats.

Or

4. (b) What are the sources of Air pollution, their effects and control measures?

(DBOT 03)

M.Sc. (Previous) DEGREE EXAMINATION, MAY 2009.

First Year

Botany

Paper III — CYTOLOGY, GENETICS AND PLANT BREEDING

Time : Three hours

Maximum : 100 marks

SECTION A — (5 × 8 = 40 marks)

Write critical notes on any FIVE of the following.

Each question carries 8 marks.

25. Meiosis and its significance.

26. Cell cycle.