

(DBOT 01)

M.Sc. (BOTANY) (Previous) DEGREE EXAMINATION :: MAY 2006

**Paper - I : BIOLOGY AND DIVERSITY OF ALGAE, BRYOPHYTES, PTERIDOPHYTES
AND GYMNOSPERMS**

Time: Three hours

Maximum : 100 Marks

**Answer any FIVE questions from Section - A
Each question carries 8 marks
Also answer ALL the question from Section - B
Each question carries 15 marks**

SECTION - A

(5 X 8 = 40 marks)

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| 1. Sexual reproduction in <u>Vaucheria</u> . | 2. Heterocyst. |
| 3. Archegoniophore of <u>Marchantia</u> . | 4. Pseudoclaters. |
| 5. Sporangia of <u>Rhynia</u> . | 6. Enation theory. |
| 7. L.S. of Ovule of <u>Gnetum</u> . | 8. Ovuliferous scales |

SECTION - B

(4 X 15 = 60 marks)

9. (a) Give an account of the structure of typical Cyanophycean cell.
Or
(b) Describe the structure and development of sex organs of Chara.
10. (a) Write critical notes on heterospory and seed habit.
Or
(b) Discuss the structure development and morphological nature of a sporocarp studied by you.
11. (a) Detail the structure and development of the sporophyte of Anthoceros.
Or
(b) Enumerate the distinctive features of the class Bryopsida and in what respects it differs from the other Bryophytes.
12. (a) List the salient features of Gymnosperms and point out their resemblance with Angiosperms.
Or
(b) Describe the development of the Female gametophyte, Pollination and fertilization in Pinus.

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