

**M.Sc. Botany (Previous ) DEGREE EXAMINATION, MAY 2007.  
First Year**

**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.**

**Answer ALL questions from Section B.**

**Each question carries 15 marks.**

**SECTION A - ( 5 X 8 = 40 marks )**

- |                          |  |
|--------------------------|--|
| 1. Akinetes.             | 2. Cystocarp.                            |
| 3. Antheridiophore.      | 4. Gemmae cups.                          |
| 5. <u>Lepidodendrow.</u> | 6. Heferospory.                          |
| 7. Bennetitiales.        | 8. Classification of fossil Gymnosperms. |

**SECTION B - ( 4 X 15 = 60 marks )**

9. (a) Write an account on the economic importance of algae.  
Or  
(b) Describe the reproduction and life cycles in phaeophyta.
10. (a) Describe the process of reproduction and life cycles of Anthocerotophida and has do you enumerate that Anthocerotopsida is evolved over Hepaticopsida.  
Or  
(b) Describe the evolution of sporophyte in bryophytes.
11. (a) Describe the development of stele in pteridophytes.  
Or  
(b) What are the characters of sphaenopsida and how sphaenopsida is more evolved over Lycopsida.
12. (a) Describe the cones of coniferales and enumerate the development of male gametophytes in coniferales.  
Or  
(b) Write an account on the classification of living Gymnosperms and also economic uses of gymnosperms.