## M.Sc. (Previous) DEGREE EXAMINATION, MAY 2008.

#### First Year

#### **Botany**

# Paper II — SYSTEMATICS OF ANGIOSPERMS AND PLANT ECOLOGY

Time: Three hours Maximum: 100 marks

### SECTION A $-(5 \times 8 = 40 \text{ marks})$

### Answer any FIVE questions

## Each question carries 8 marks.

- 1. Units of plant classification.
- 2. Synthetic system of plant classification.
- 3. Taxonomic categories.
- **4.** Role of anatomy in plant taxonomy.
- **5.** Hydrological cycle.
- **6.** Homeostasis.
- 7. Continental drift.
- 8. Ex-situ conservation.

### SECTION B— $(4 \times 15 = 60 \text{ marks})$

#### **Answer ALL questions**

### Each question carries 15 marks.

**9.** (a) Give a comparative account on the plant distribution in the past and present in India.

 $\mathbf{Or}$ 

- (b) Discuss the merits and demerits of post- Darwinian systems of classification.
- **10.** (a) Describe the basic principles of plant taxonomy and add a note on ICBN.

 $\mathbf{Or}$ 

- (b) Describe the role of Phytochemistry in plant taxonomy.
- 11. (a) Describe the biogeochemical cycle of nitrogen.

- (b) What is plant succession? Describe the changes taking place during plant succession.
- 12. (a) Discuss the causes and consequences of soil pollution.

 $\mathbf{Or}$ 

(b) Discuss the strategies to conserve natural resources with special reference to water.