## Eastern University, Sri Lanka. Second Year Examination in Science - 1994/5 and 1995/6 (Aug 1997)

## BT-202 &203 D'evelopmental Physiology and Plant Taxonomy

Time: 2 hours

Answer FOUR questions only choosing TWO from each part



## Part A

- 1. a) Give an account of the role of Gibberellic Acid in plant growth and development.
  - b) State the role of Abscisic Acid during water stress in plants.
- 2. Write short notes on any TWO of the following
  - a) Hydroponics
  - b) Plant Growth Movements
  - c) Phytochrome
- 3. a) List the essential elements in plant nutrition. Why are they considered "essential"?
  - B) For any THREE macro nutrients, give the following;
    - 1. the form in which they are available to plants.
    - 2. their main role in plant metabolism.
    - 3. diagnostic deficiency symptoms in plants.

## Part B

- 4. Give a brief account on two of the following
  - a. Family Leguminosae or Palmae
  - b. Plant Characters of use in Taxonomy
  - c. Parallelism and convergence in plant evolution
- 5. Give an account of two of the following
  - a. Origin of Angiosperms
  - b. Herbaria
  - c. Binomial Nomenclature
- 6. What are the different approaches to plant classification and briefly comment on the salient features of each.

Compare the features of the Englerian and the Besseyan schools in reference to angiosperm classification.