

Eastern University, Sri Lanka



Third Year Second Semester Examination in Science 2012/2013 (Sep. 2015)

BT 304, Developmental Physiology

Answer all questions

Time: 02 Hours

(1) Answer the following

- a) Classify different types of plant movements
- b) Briefly explain the importance of apical dominance in plants
- c) List out the essential mineral elements. Write the importance of two of them in plant growth and development
- d) Diagrammatically illustrate the **nutrient film growth system**
- e) Differentiate between **Bioassay** and **Biosynthesis**

(30 minutes)

- (2) a) Write the importance of Phytochrome in flowering of plants
- b) How does Gibberellic acid contribute in flowering process of plants?
- c) Briefly describe the short day plants and long day plants

(30 minutes)

- (3) a) What is dormancy?
- b) Briefly describe the factors that affecting seed dormancy

(30 minutes)

- (4) a) List out the major steps involved in Nitrogen fixation
- b) Briefly describe the activities of biological organisms that are involved in the steps you have mentioned in 4(a), with suitable examples

(30 minutes)