

Eastern University, Sri Lanka

External Degree Examination in Science
Third Year Second Semester Examination in Science 2009/2010 (May/June 2015)

EXTBT 304, Developmental Physiology



Answer all Questions

Time: 02 hours

1. Compare the followings
 - (a) Symbiotic nitrogen fixation and non-symbiotic nitrogen fixation.
 - (b) Phytochrome red (Pr) and Phytochrome Far-red (Pfr).
 - (c) Hydrolytic and phosphorylytic pathways in carbohydrate metabolism.

(30 minutes)

2. Write short notes on the followings
 - (a) Effect of Abscisic acid in stomatal movement.
 - (b) Effect of light on seed germination.
 - (c) Effect of water on nastic movement of plant.

(30 minutes)

3. Briefly describe the followings
 - (a) Importance of Hydroponics in plant culture
 - (b) Cold treatment for inducing flowering

(30 minutes)

4. Explains the following statements
 - (a) "Abscission is a combination effect of phytohormones"
 - (b) "Long day plants differ from short day plants"
 - (c) "Gibberelic acid (GA) is one of the important factors in seed germination"

(30 minutes)