

Eastern University, Sri Lanka**Second Year First Semester Examination in Science 2003/2004
(November/December 2004) (Proper/Repeat)****BT 201, Developmental Physiology****Answer All Questions****Time: 02 hrs**

1. Discuss the following statements:
 - (a) "Senescence is a productive phase of plant growth and development".
 - (b) "Turgor movements protect plants from herbivores".
 - (c) "Abscisic-acid is a stress relieving hormone".

2. (a) "Dormancy has an important role in plant survival", explain.
(b) Briefly explain the factors which causing seed dormancy.
(c) Graphically explain the major events which take place during seed germination.

3. Explain the following statements:
 - (a) "Quality of light is important for flowering"
 - (b) "Breakdown of lipids takes place in different sites of a cell in a germinating seed"
 - (c) "Aeroponic growth systems have more advanced features than hydroponic growth systems"

4. (a) Outline the biogeochemical cycle that utilizes atmospheric nitrogen as a source.
(b) List the important organisms and their role/s in the above cycle.
(c) Discuss the major biological interactions of the organisms in the above cycle.