Eastern University, Sri Lanka First Year First Semester Examination in Science (Proper) – 2011 / 2012 BT-101 / Plant Diversity (January / February-2014)

1 OCT 2014

Answer All Questions. Time: 02 hours.

1. Distinguish between;

- a). Archegonium and Oogonium.
- b). Hapteron and Homogonium.
- c). Conceptacle and Cystocarp.
- d). Spermatangium and Synangium.

2. Explain the following statements with fully labelled diagrams;

- a). Marchantia sporophyte is a dependant generation.
- b). Water is essential for the dissemination of spores in Anthoceros.
- c). Function of pseudopodium is important in Sphagnum.
- 3. a). What is a sporophyll?
 - b). Compare the strobilus of Equisetum with that of Selaginella.
 - c). Describe the gametophyte of *Psilotum* with suitable labelled diagram.
- 4. Write brief notes with fully labelled diagrams on the followings;
 - a). Fully matured female cone of Pinus.
 - b). Gymnosperms do not have true endosperm.
 - c). Male cone of Cycas.
 - d). Corolloid root of Cycas.