

Eastern University, Sri Lanka.
First Year Second Semester Examination in Science – 2015 / 2016
(May/June – 2018)
BT 101 – Plant Diversity

(Repeat)

Time: TWO hours
Answer ALL questions

1. a). “Land plants” arose from “aquatic algal ancestor” Discuss this statement.
b). Describe **FOUR** different types of life cycle occurring in the chlorophyta. Illustrate your answer with fully labeled diagrams and suitable examples.

2. Discuss the features of evolutionary importance exhibited in the following.
 - a). gametophyte of *Marchantia*
 - b). sporophyte of *Anthoceros*
 - c). gametophyte of *Pogonatum*

3. a). What is a strobilus?
b). Compare the strobilus of *Equisetum* with the male strobilus of *Cycas*, with fully labeled diagram.

4. Describe the following with suitable labeled diagram.
 - a). male gametophyte of *Pinus*
 - b). female gametophyte of *Cycas*
 - c). gametophyte of *Psilotum*