

**Eastern University, Sri Lanka**  
**Faculty of Science**

**First Year First Semester Examination in Science 2016/2017 (Aug./Sep. 2018)**

**BT 105, Introduction to Environmental Sciences (Old Syllabus)**

**Time: 1 hour**

**Answer all the questions**

1. (a) Define “residence time” in Lakes? (15 marks)
- (b) What is the formulae used to calculate the residence time? (10 marks)
- (c) Explain the *residence time* by giving THREE examples (25 marks)

**Question 1: 50 marks**

2. Answer the following, with illustrations if appropriate
- (a) What are the major components of an ecosystem? (05 marks)
- (b) Briefly explain the “Energy Pyramid” (10 marks)
- (c) Give one example of a food chain for a paddy field and a home-garden (10 marks)
- (d) Diagrammatically illustrate the water cycle (10 marks)
- (e) List FIVE negative impacts due to forest destruction/deforestation (05 marks)
- (f) Briefly describe the impacts of climate change on environment (10 marks)

**Question 2: 50 marks**

**Total = (50 + 50) = 100 marks**