

THE OPEN UNIVERSITY OF SRI LANKA
B.Sc. DEGREE PROGRAMME
BOTANY - LEVEL 04
FINAL EXAMINATION - 2013/2014
PCU2104 - ENVIRONMENTAL STUDIES



DURATION: TWO (02) HOURS

DATE: 04th December 2014

TIME: 9.30 a.m.- 11.30 a.m.

Answer **any four (04)** questions.

1.
 - a. What is “biosphere”?
 - b. How does biosphere integrate with other spheres in the environment?
 - c. Illustrate the relationship between population growth and population size in a natural ecosystem.
 - d. Write a brief account on “ecological succession”.
2. Discuss in detail how land degradation is affected by reduction of forest cover, introduction of agriculture, urban conversion and overgrazing.
3.
 - a. What is “nutrient cycling”?
 - b. Why is nutrient cycling important?
 - c. List the major reservoirs of Carbon, Nitrogen and Sulphur in the environment.
 - d. Explain briefly the pathways through which a sulphur molecule present in fossil fuels is seen in an amino acid molecule of an animal.
4.
 - a. What is global warming?
 - b. Discuss the major effects of global warming.
 - c. Explain how Ozone is depleted by the presence of Chlorofluorocarbon (CFC).
5. Write an account with examples on “Sources and types of water pollutants”.
6. Write short notes on **any three(3)** of the following.
 - a. Energy from falling water and oceans
 - b. Rio Earth Summit
 - c. Hazardous waste disposal
 - d. Tropic structure and energy pyramids