

**THE OPEN UNIVERSITY OF SRI LANKA**  
**Diploma in Environmental Science**  
**FINAL EXAMINATION - 2017/2018**  
**BYD 1105 – PLANT EARTH AND ITS ENVIRONMENT**



**DURATION- TWO (2) HOUR**

**DATE: 12<sup>th</sup> May 2018**

**TIME: 9.30am-11.30am**

**Answer any four (4) questions**

1. a. Define the term “bio geochemical cycle”.
- b. What is the significance of bio geochemical cycles?
- c. Describe the **natural pathways** by which nitrogen is cycled among the biotic and abiotic components in an eco system.
  
2. a. What is meant by a “trophic level” and a “food chain” in an ecosystem?
- b. (i) Name the different trophic levels in an ecosystem and  
(ii) Arrange them accordingly to indicate the relationship between the trophic levels and a food chain in the ecosystem.
- c. Briefly explain the following statements  
(i) “Shorter food chains are more efficient .in releasing energy”  
(ii) “In nature, isolated food chains rarely exist”.
  
3. a. How would you broadly classify the “**natural resources**” in the biosphere? Give one (01) example for each category.
- b. Name the major living resources found in Sri Lanka.
- c. Write a short essay on “coral reefs found in Sri Lanka “indicating types, characteristic features, importance and human impact,
  
4. a, What is meant by “Green House Effect “?
- b. Discuss the correlation between the “Green house effect” and the “Global warming”., while indicating the effects on the environment .
  
5. What do you mean by “Plate tectonic theory”?
- b. List the main plate boundaries found at the edge of the lithospheric plates.
- c. Write a short account about the Convergent boundaries.

6. Write short notes on any **three (3)** of the following.
- a. Fresh water resources in Sri Lanka.
  - b. Adaptations of plants for life on earth
  - c. **Main** characteristics of phylum Arthropoda.
  - d How does the location of the epicenter of the earthquake is located by seismologists?