THE OPEN UNIVERSIT OF SRI LANKA
B.Sc / B.Ed DEGREE PROGRAMME
BOTANY – LEVEL 04
FINAL EXAMINATION - 2011/2012
PCU2104 – ENVIRONMENTAL STUDIES
DURATION- TWO (2) HOUR

DATE: 8th December 2012 **TIME: 9.30 a.m. -11.30 a.m.**

Answer any four (4) questions

1. a. Give examples for two major types of raw material cycles found in nature.
   b. What are the differences between these two cycles?
   c. Describe the **natural pathways** by which nitrogen in a dead plant body is made available again to the living plants.
   d. State the impacts of heavy application of chemical nitrogen fertilizer on nitrogen cycle.

2. a. What is meant by a "trophic level" (feeding level) in an ecosystem?
   b. Name the different trophic levels in an ecosystem and arranged them accordingly to indicate the direction of energy path /food path in the ecosystem.
   c. Write an account on the fate of solar energy in a forest ecosystem.

3. a. Define the term "population density"
   b .What are the features that determine the size of a population?
   c. Explain the growth pattern of a natural population.
   d. Giving reasons, discuss how the growth pattern of human population began to depart from that of a natural population.

4. Discuss the relationship between the "Green house effect" and the "Global warming".

5. a. What is an Environmental Impact Assessment (EIA)?
   b. Identify the importance of an EIA for effective environmental management and sustainable development.
   c. List the series of steps involved in an EIA process and, describe it's 1st step in detail.

6. Write short notes on any **three (3)** of the following.
   a. Vertical zonation of the atmosphere.
   b. Uses of fresh water and the fresh water resources.
   c. Water pollution control.
   d. Hazardous and Toxic wastes disposal methods.