

Open University of Sri Lanka  
Post graduate Diploma in Environmental Science  
Academic year 2011/2012  
Final Examination  
Course title – Understanding the Environment.  
Course code – NEP1301



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Date – 31<sup>st</sup> March 2012

Time – 9.30 am -12.30 pm

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Answer any four (4) questions.

1. a) Describe the basic structure and composition of ecosystems.  
b) Compare a tropical forest ecosystem and a paddy field ecosystem in terms of species richness, species dominance, food and feeding relationships, inputs and outputs to the ecosystem, and ecosystem stability.
  2. a) Describe in detail the constituents of moist air.  
b) Explain the structure of the atmosphere based on temperature and pressure variations.  
c) Name and describe two global environmental problems associated with the atmosphere.
  3. a) List the basic features of nutrient cycles.  
b) Explain the natural processes that maintain nitrate ions ( $\text{NO}_3^-$ ) in soil.
  4. Write an essay on Natural Disasters.
  5. a) What is ecological succession?  
b) Describe how biological structure of communities and community energetic change during ecological succession.
  6. a) Explain the physical properties of freshwater.  
b) Compare lentic water habitats and lotic water habitats with respect to distribution and abundance of living organisms.
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