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**END OF 2ND TRIMESTER 2016 (PT) EXAMINATION**

**SCHOOL : SCIENCE AND TECHNOLOGY**

**DEPARTMENT : PURE AND APPLIED SCIENCES**

**UNIT CODE : ENVI 201**

**UNIT TITLE : ENVIRONMENTAL SCIENCE**

**TIME : 2 HOURS**

**INSTRUCTIONS: *Answer All Questions in section A and any Two Questions from SECTION B.***

**SECTION A**

**Question One**

a) Explain the structural attributes of an ecosystem. (3 Marks)

b) Explain a producer and describe two main categories of producers common in natural ecosystems. (3 Marks)

c) Describe mandate of Kenya Wildlife Service. (2 Marks)

d) Illustrate the generalized model of nutrient cycling in an ecosystem. (2 Marks)

**Question Two**

a) Explain a food chain and the various types of food chains common in an

ecosystem (3 Marks)

b) Describe three important properties of populations. (3 Marks)

c) State four main environmental problems of the global concern and state

 one main cause of each.(4 Marks)

**Question Three**

a) Describe three mechanisms that initiate land degradation. (3 Marks)

b) Describe three ways of curbing increase of carbon dioxide levels in the atmosphere. (3 Marks)

c) What is water pollution and describe two types of water pollution

 sources? (4 Marks)

**SECTION B**

**Question Four**

a) Discuss anthropogenic activities that cause loss of biodiversity in the world. (10 Marks)

b) Discuss the main causes of the long-lasting water shortages in many areas. (10 Marks)

**Question Five**

a) Discuss the major environmental consequences of deforestation in Kenya.(10 marks)

b) Stratospheric ozone layer is essential to life on earth. Discuss. (10 Marks)

**Question Six**

a) Explain the effects of human overpopulation on health. (8 Marks)

b) Discuss the advantages and disadvantages of renewable energy.

 (12 Marks)