

**NATIONAL UNIVERSITY OF LESOTHO - FACULTY OF AGRICULTURE  
DEPARTMENT OF SOIL SCIENCE & RESOURCE CONSERVATION**

**AGR320 - ENVIRONMENTAL AWARENESS**

**Final Examination paper**

**May, 2016**

**Total Marks: 100**

**3hours**

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**Instructions:**

This paper contains five (5) questions

All questions carry equal marks (25 marks)

**Answer FOUR (4) QUESTIONS ONLY**

**Answer ALL three (3) questions from Section A and only one (1) question from Section B**

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## SECTION A

### Question 1 (25)

- a) Describe the effects of the following environmental degradation concepts (20)
- i. Persistent pollutants
  - ii. Acidification
  - iii. Biodiversity
  - iv. Water quality standards
- b) How does water pollution by sediments and urban sewage affect the water quality? (5)

### Question 2 (25 marks)

- a) What is climate change? (5)
- b) What is the Global mean surface temperature and how is it related to global warming? (5)
- c) What is the relationship between global warming and climate change? (5)
- d) Differentiate between ozone depleting agents and green-house gases. (6)
- e) Mention any two major green-house gases **SOURCES** in Lesotho (4)

### Question 3 (25 marks)

- a) Choose ONE question (15 marks)
- i) In your own opinion, should environmental policies in Lesotho prioritize on mitigation or adaptation measure to reduce the impact of climate change?
  - ii) How can indigenous knowledge, language, and culture be used for sustainable environmental protection
  - iii) In your opinion, discuss at least five (5) socio-economic or land use issues that lead to food insecurity in Lesotho.
  - iv) In your own opinion, explain at least five (5) reasons to indicate the good or the bad of the growing population in Lesotho.
- b) Based on the question discussed in (a), identify the legislation at international or at national level that address at least two (2) of the points mentioned. (10)

## **SECTION B**

### **Question 4 (25 Marks)**

Describe how environment degradation leads to food insecurity. (25)

**OR**

### **Question 5 (25 Marks)**

Discuss how biodiversity affect ecosystem sustainability. (25)