



*“Investing in Africa’s Future”*

**COLLEGE OF HEALTH AGRICULTURE AND NATURAL SCIENCES**

**DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES**

**ANR 201: ENVIRONMENTAL SCIENCE AND POLLUTION**

**END OF FIRST SEMESTER EXAMINATIONS**

**NOVEMBER 2019**

**LECTURER: MS M. C. KUREHWATIRA**

**DURATION: 3 HRS**

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***INSTRUCTIONS***

**Answer Question 1, Question 2 and any other TWO questions**

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### Question 1

- a) Define the following:
- i. Cultural Eutrophication, [2 marks]
  - ii. Pollution, [2 marks]
  - iii. Primary pollutant [2 marks]
  - iv. Water quality and [2 marks]
  - v. Green house effect. [2 marks]
- b) Describe the point sources and non-point sources of water pollution in Africa. [15 marks]

### Question 2

- a) Describe the three categories into which water quality parameters can be placed, give three examples for each category. [9 marks]
- b) Explain the importance of EC and BOD in determining water quality. [4 marks]
- c) Describe any four primary pollutants and highlight their sources. [12 marks]

### Question 3

- a) In Africa, it is not the loss of ozone that is a problem but too much ozone. Discuss. [5 marks]
- b) Discuss the causes and impacts of cultural eutrophication. [20 marks]

### Question 4

- a) Describe three (3) greenhouse gases in the atmosphere highlighting their sources. [9 marks]
- b) Discuss the importance of public awareness to environmental pollution. [15 marks]

### Question 5

- a) Discuss, giving examples, the potential solutions to the environmental pollution problems facing Africa. [20 marks]
- c) Mention the diseases associated with pollution. [5 marks]



### Question 6

a) Discuss the possible consequences of global warming on:

- i. Human health, [5 marks]
- ii. Biodiversity and [4 marks]
- iii. Food security. [4 marks]

b) Describe the effects of Ultra violet radiation of humans and the ecosystem.

[12 marks]