



*“Investing in Africa’s Future”*

**COLLEGE OF HEALTH AGRICULTURE AND NATURAL SCIENCES**

**DEPARTMENT OF AGRICULTURAL SCIENCES**

**NANR 211: ENVIRONMENTAL SCIENCE AND POLLUTION**

**END OF SECOND SEMESTER EXAMINATIONS**

**APRIL/ MAY 2023**

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

**DURATION: 3 HRS**

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**INSTRUCTIONS**

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

### **Question 1**

- a) With reference to the St. Joseph's bridge clean up event, discuss three possible causes of poor waste management in the community. **[15 marks]**
- b) Describe any two potential solutions to poor waste management in this community. **[10 marks]**

### **Question 2**

- a) Discuss in detail, giving relevant examples, three reasons for controlling emission of primary air pollutants in Africa. **[15 marks]**
- b) Describe two potential strategies that may be used to reduce emission of primary air pollutants in Africa. **[10 marks]**

### **Question 3**

With the aid of a flow diagram, describe in detail the solid waste management process that was followed at the organisation where you were attached. **[25 marks]**

### **Question 4**

Give a detailed analysis of the impacts of pollution in Africa. **[25 marks]**

### **Question 5**

- a) Discuss the importance of water quality assessment in Africa. **[10 marks]**
- b) Discuss the possible consequences of global warming on:
  - a. Human health, **[5 marks]**
  - b. Biodiversity and **[5 marks]**
  - c. Food security. **[5 marks]**

### **Question 6**

Africa has the lowest total greenhouse gas emissions, however, the impacts of global warming are more severe in Africa. Discuss. **[25 marks]**