



“Investing in Africa’s Future”

COLLEGE OF HEALTH, AGRICULTURE AND NATURAL SCIENCES

DEPARTMENT OF ENVIRONMENTAL STUDIES AND NATURAL RESOURCES

NANE 211: ENVIRONMENTAL SCIENCE AND POLLUTION

END OF SECOND SEMESTER FINAL EXAMINATIONS

APRIL 2022

LECTURER: MS. M. C. KUREHWATIRA

DURATION: 3 HOURS

INSTRUCTIONS

Answer all question in Section A and any two questions in Section B.

Section A

Question 1

Critically analyse the sewage treatment process at Gimboki sewage treatment plant in Mutare. **[25 marks]**

Question 2

a) Describe the following

- | | |
|--------------------------------|------------------|
| i. Conventional pollutants | [5 marks] |
| ii. Point sources of pollution | [5 marks] |
| iii. Global warming | [5 marks] |

- b) Discuss the impact of ozone layer depletion on human beings and on the environment. [10 marks]

Section B

Question 3

- a) Pollution is one of the major environmental challenges facing the world today. With reference to an African country, describe in detail the sources of water pollution. [9 marks]

- b) Discuss the impacts of air pollution in Africa and suggest possible solution to these impacts. [16 marks]

Question 4

- a) Environmental Science is an interdisciplinary science. Discuss. [10 marks]
- b) Around the world, five major types of substances are released directly into the atmosphere in their unmodified forms in sufficient quantities to pose a health risk. describe any three of these substances. [9 marks]
- c) Discuss the importance of water quality assessments for agricultural purposes. [6 marks]

Question 5

With the aid of a flow diagram, describe in detail the waste management process at Africa University. [25 marks]

END OF EXAMINATION PAPER