



*"Investing in Africa's Future"*

**COLLEGE OF SOCIAL SCIENCES, THEOLOGY,  
HUMANITIES AND EDUCATION**

**HES327 ENVIRONMENTAL POLLUTION AND CONTROL**

**END OF FIRST SEMESTER EXAMINATIONS**

**NOVEMBER/DECEMBER 2017**

**LECTURER: Dr D. Mlambo**

**DURATION: 3HRS**

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**GENERAL INSTRUCTIONS TO CANDIDATES**

1. Do **NOT** write your name on the answer sheet
  2. Answer **THREE** questions only
  3. Question **1** in Section A is **Compulsory**
  4. Answer any **TWO** questions from Section B
  5. Begin your answer for each question on a new page
  6. Each question is worth **25 marks**
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## SECTION A

1. With reference to a country of your choice, discuss the effectiveness of pollution control laws and regulations.

## SECTION B

2. Describe how the following techniques are used to control sediment pollution
  - a) Sediment basin [5 marks]
  - b) A filter strip [5 marks]
  - c) Silt Fence Barriers/Filters [5 marks]
  - d) Inlet Protection Devices [5 marks]
  - e) Stabilized Construction Entrance [5 marks]
3. Assess the importance of measuring the following parameters to determine water quality
  - a) Fecal coliform [5 marks]
  - b) Dissolved oxygen [5 marks]
  - c) Nitrogen [5 marks]
  - d) Turbidity [5 marks]
  - e) Electrical conductivity [5 marks]
4. Explain the effects of the following pollutants on the environment:
  - a) Plastic waste [7 marks]
  - b) Agrochemicals [6 marks]
  - c) Particulate matter [6 marks]
  - d) Heavy metals [6 marks]
5. With the aid of diagrams, illustrate how the following devices are used to control air pollution
  - a) Bag filter [9 marks]
  - b) Electrostatic precipitator [8 marks]
  - c) Wet scrubber [8 marks]