



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MEDICAL ENGINEERING

**UNIVERSITY EXAMINATION FOR:**

**DIPLOMA IN MEDICAL ENGINEERING**

**ECL2205: SANITATION AND ENVIRONMENTAL MANAGEMENT**

**SPECIAL/SUPPLEMENTARY EXAMINATION**

**SERIES: SEPTEMBER 2018**

**TIME: 2 HOURS**

**DATE:** Pick Date Sep 2018

## Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

**Do not write on the question paper.**

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## **Question ONE**

(a) Describe the following terms

- i) Pollution
- ii) Environmental management
- iii) Sanitation Environment
- iv) Environmental degradation

(10 marks)

(b) Describe five environmental issues in Kenya

(10 marks)

(c) i) Explain how depletion of Ozone layer occurs citing the cause

ii) Outline the effects of acid rain on the environment

(10 marks)

## **Question TWO**

(a) Describe four prevention and control measures for industrial pollution

(10 marks)

(b) Describe the two categories for decomposition of biological pollutants

(10 marks)

## **Question THREE**

- (a) Describe the three fundamental causes of environmental pollution (12 marks)  
(b) Explain the four basic methods of water pollution control (8 marks)

#### **Question FOUR**

- (a) i) Describe the following terms as used in Environmental Management  
I) Environmental Impact Assessment  
II) Environmental Audit  
ii) Explain the two roles of Environmental Impact assessment (10 marks)  
(b) Using illustration or otherwise, describe the process of activated sludge (10 marks)

#### **Question FIVE**

- (a) i) Describe the three characteristics of environmental pollutants  
ii) Describe the following terms  
I) Industrial smog  
II) Photochemical smog (10 marks)  
(b) i) Differentiate between Re-use and Recycle methods used in solid waste management  
ii) Explain any three methods of waste disposal (10 marks)