



# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 - Meru-Kenya.

Tel: +254 (0)799529958, +254 (0)799529959, +254 (0)712524293

Website: [www.must.ac.ke](http://www.must.ac.ke) Email: [info@must.ac.ke](mailto:info@must.ac.ke)

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## University Examinations 2024/2025

### FIRST YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF MASTERS IN PUBLIC HEALTH

#### MPH 5116: ENVIRONMENTAL HEALTH SCIENCES

**DATE: JANUARY 2025**

**TIME: 3 HOURS**

#### INSTRUCTIONS:

Answer Question one and any other three Questions

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#### QUESTION ONE (40 MARKS)

- a) Briefly discuss the role of environmental health in controlling infectious diseases (5 Marks)
- b) Briefly discuss the factors driving the Emergence and Re-emergence of infectious diseases as in the recent past (5 Marks)
- c) Describe how Environmental Risk Assessment (ERA) is applied in managing risks to ecosystems and human health (7 Marks)
- d) Briefly discuss the role played by environmental health in any society (6marks)
- e) Briefly discuss the adaptation and mitigation strategies being applied to reduce the impacts of climate change (7 marks)

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#### QUESTION TWO (10 MARKS)

Environmental determinants significantly shape health outcomes and influence public health strategies for disease prevention and control. Giving examples, examine current environmental determinants that influence individual and population health

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#### QUESTION THREE (10 MARKS)

Discuss the toxicological dynamics of toxic substances such as heavy metals and chemicals when an organism is exposed, giving the best prevention control methods currently available

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## **QUESTION FOUR (10 MARKS)**

Examine structural and environmental factors that increase health risks from climate related challenges

## **QUESTION FIVE (10 MARKS)**

Discuss the application of disaster management in environmental protection and infectious disease control



**MUST is ISO 9001:2015 and**



**ISO/IEC 27001:2013 CERTIFIED**

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