

# **MACHAKOS UNIVERSITY**

**University Examinations 2016/2017** 

#### SCHOOL OF HEALTH SCIENCES

#### DEPARTMENT OF PUBLIC HEALTH

# FIRST YEAR SECOND SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE (POPULATION HEALTH)

#### HEH 100: FOUNDATIONS OF ENVIRONMENTAL HEALTH

DATE: 31/5/2017 TIME: 8:30 – 10:30 AM

# INSTRUCTIONS

This paper consists of two sections A and B

Section A is compulsory

Section B choose any two (2) questions

Illustrate your answer with neat, clear and well labeled diagrams as appropriate

### **SECTION A (30 Marks) Compulsory**

### **QUESTION ONE**

a)	State three routes of exposure to environmental hazards. For each one give an example of	
	an environmental hazard to which you can get exposed through that route	(3 marks)
b)	Differentiate between exposure and dose	(3 marks)
c)	Describe the various states and types of chemical hazards	(3 marks)
d)	Explain the consequences of water associated diseases	(3 marks)
e)	Explain the functions of NEMA in environmental protection	(3 marks)
f)	Identify the steps involved in carrying out an environmental risk assessment	(3 marks)
g)	Explain ways through which RTAs can be minimized in Kenya	(3 marks)
h)	Distinguish between ionizing and non-ionizing radiation	(3 marks)

- i) Disasters can be classified into two main categories. Explain the categories and give an example for each (3 marks)
- j) Explain how ozone layer depletion occurs and name the consequences associated with it
  (3 marks)

# SECTION B: CHOOSE ANY TWO (2) QUESTIONS. EACH QUESTION IS 20 MARKS QUESTION TWO (20 MARKS)

- a) Explain the health effects of hazards found in the environment (10 marks)
- b) Describe the control measures of hazards found in the environment (10 marks)

#### **QUESTION THREE (20 MARKS)**

- a) Water is life but it can also be a source of disease. Justify this statement (10 marks)
- b) Explain the various challenges faced in the control and prevention of water associated diseases (10 marks)

### **QUESTION FOUR (20 MARKS)**

- a) Describe the health effects associated with exposure to radioactive substances (10 marks)
- b) Describe the ways through which indoor air pollution can be reduced/minimized

(10 marks)

## **QUESTION FIVE (20 MARKS)**

- a) Describe the benefits of conducting an environmental impact assessment (10 marks)
- b) Explain the environmental outcomes that have been attributed to global warming

(10 marks)