



MACHAKOS UNIVERSITY

University Examinations 2020/2021 Academic year

SCHOOL OF HEALTH SCIENCES

DEPARTMENT OF PUBLIC AND COMMUNITY HEALTH

FIRST YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN PUBLIC HEALTH.

HPH 104: FUNDAMENTALS OF ENVIRONMENTAL HEALTH

DATE: 25/2/2021

TIME: 8.30-10.30 AM

INSTRUCTIONS

This paper consists of two sections A and B

SECTION A

Specific Instructions

- *This section has one question*
- *The question is compulsory*
- *The question is 30 marks*

QUESTION ONE (30 MARKS)

- a) Define the following terms (4 marks)
- Public health
 - Environmental health
 - Evaluation
 - Primary health care
- b) Outline the contributions of the following scientists to environmental health (4 marks)
- Louis Pasteur
 - Elizabeth Blackwell
- c) Explain the role of planning and organizing in an environmental health organization (4 marks)
- d) Examine the concept of zero-waste management and its implication on environmental health practice (4 marks)
- e) Differentiate between terminal and pre-evaluation as applied in environmental health practice (4 marks)

- f) Discuss the role of ethics in research using the following concepts (3 marks)
- i. Justice
 - ii. Respect for persons
 - iii. Beneficence
- g) Outline the components of occupational health services (3 marks)
- h) Describe the epidemiological triad using the concepts of disease causation (4 marks)

SECTION B:

Specific Instructions

- **This Sections has four (4) questions**
- **Answer any two (2) questions**
- **Each question is 20 marks**

QUESTION TWO (20 MARKS)

- a) As a public health officer in Kibera slums, discuss the challenges experienced in housing, water, and waste control (10 marks)
- b) A public health student comes across a research article indicating that Bamako and Maputo Convention play negligible roles in protecting the environment. Using examples, critique this statement (10 marks)

QUESTION THREE (20 MARKS)

- a) Explain the role of the Public health Act (cap 242) in safeguarding human health (12 marks)
- b) Discuss the social impacts of communicable diseases in Africa (8 marks)

QUESTION FOUR (20 MARKS)

- a) The Hazard Analysis and Critical Control Point (HACCP) focuses on specific steps to mitigate risks in the food industry. Critically evaluate this statement (12 marks)
- b) The health belief model looks at perceived susceptibility, perceived severity, perceived community impact, perceived barriers, and perceived costs. Discuss (8 marks)

QUESTION FIVE (20 MARKS)

- a) You were recently approached by a learning facility to undertake public health education on Covid 19. Discuss the principles and content that will guide the process (10 marks)
- b) Priority setting is an important aspect of determining the agenda of public health activities. Discuss (10 marks)