



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
PUBLIC HEALTH/COMMUNITY HEALTH AND DEVELOPMENT
2ND YEAR 1ST SEMESTER 2019/2020 ACADEMIC YEAR
KISUMU CAMPUS

COURSE CODE: HCD 3215

COURSE TITLE: ENVIRONMENTAL HEALTH

DATE: 15/08/2019

EXAM SESSION: 2.00 – 4.00 PM

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in Section A and TWO questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the Examination room.**

SECTION A (30 Marks): Answer ALL questions

1. Explain the following contributors to Environment by giving examples:
 - i. Chemical (2 marks)
 - ii. Biologic (2 marks)
 - iii. Physical (2 marks)
 - iv. Socio-economic (2 marks)
2. Highlight sources of water contamination. (2 marks)
3. Distinguish between environmental toxin and environmental poison. (2 marks)
4. Explain the concept of Clinical Ecology. (2 marks)
5. Pesticides can enter the human body in three ways. Describe them. (6 marks)
6. Highlight the health effects when you are exposed to high energy radiation. (2 marks)
7. Explain the term "Toxicokinetics" (2 marks)
8. Highlight health effects of Ozone (O₃) (2 marks)
9. State why it is important to carry out risk assessment of Environmental Health and Toxicology. (2 marks)
10. Highlight types of bio-tests currently used for impact assessment. (2 marks)

SECTION B (40 Marks): Answer TWO questions

11. Describe air pollutants and their impacts to humans health. (20 marks)
12. a. Define Environmental Partitioning. (2 marks)
b. Highlight main goals of Environmental Partitioning. (6 marks)
c. Describe TRUEX process as a status of partitioning. (12 marks)
13. a. Distinguish between risk and hazard. (4 marks)
b. Describe steps in microbial risk assessment. (16 marks)
14. Discuss the principle of toxic waste management. (20 marks)