



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
4TH YEAR 1ST SEMESTER 2018/2019 ACADEMIC YEAR
KISUMU CAMPUS

COURSE CODE: HPD 3415

COURSE TITLE: ENVIRONMENTAL TOXICOLOGY

EXAM VENUE:

STREAM: BSc Public/ Comm. Hlth & Dev

DATE: 12/08/19

EXAM SESSION: 9.00 – 11.00AM

TIME: 2.00 HOURS

Instructions:

- 1. Answer all the questions in Section A and 2 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

1. Toxicity is rarely a single molecular event but rather a cascade of events, explain?
2. List any three organic pesticides.
3. Briefly define the terms toxins, toxicants and toxicology.
4. Briefly discuss the contribution of Paracelsus in toxicology
5. Outline three methods employed in toxicity testing.
6. Mention any three sites of exposure pathways of environmental chemicals to humans.
7. Define forensic toxicology.
8. what are the major organs involved in excretion toxins from the body.
9. With examples briefly define endo-toxins?
10. What is acute, sub-chronic and chronic toxicity?

SECTION B

1. Classify and discuss biological pesticides (20mks).
2. Discuss how health effect evaluation is conducted during public health assessment as described by the United States agency for toxic substances and diseases registry (10 mks).
Briefly describe how the following can be drawn from such public health assessment
 - i. Conclusion and recommendation (5mks)
 - ii. Public health action (5 mks)
3. Briefly outline metabolic process of poisonous substance in the body (10 mrks).Outline and explain different biological and chemical factors that influence toxicity (10 mks)
4. Discuss elements of exposure pathway. (10 mks). Briefly describe factors that influence toxicity of various chemicals to humans.