



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE
PUBLIC & COMMUNITY HEALTH AND DEVELOPMENT
1ST YEAR 2ND SEMESTER 2023/2024 ACADEMIC YEAR
MAIN CAMPUS

COURSE CODE: HCB 1106

COURSE TITLE: ENVIRONMENTAL HEALTH PARASITOLOGY

EXAM VENUE: **STREAM: (BSc Env. Health)**

DATE: **EXAM SESSION:**

TIME: **2.00 HOURS**

Instructions:

- 1. Answer all the questions in Section A each contain 3 marks and ANY other two questions in Section B each contain 20 marks.**
- 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)

1. Outline Apicomplexa of public health importance according to location of attack in the human host. (3 marks)
2. Define the following terms:
 - a. Hepatosplenomegaly (1/2 mark)
 - b. Paratenic host (1/2 mark)
 - c. Metacyclic trypomastigotes (1/2 mark)
 - d. Congenital infection (1/2 mark)
 - e. Longitudinal binary fission (1/2 mark)
 - f. Malabsorption syndrome (1/2 mark)
3. State changes in THREE forms which occur during the life cycle of *Entamoeba histolytica*. (3 marks)
4. Which are the main forms and habitat in the life cycle of *Giardia lamblia*. (3 marks)
5. Describe the pathogenesis of *Trichomonas vaginalis*. (3 marks)
6. State the scientific names of THREE principal vectors of *Trypanosoma brucei rhodesiense* in East and Central Africa. (3 marks)
7. Distinguish between Erythrocytic and Sporogonic cycles in malaria transmission. (3 marks)
8. Give THREE host examples of *Balantidium coli*. (3 marks)
9. Name THREE major host habitats of Nematodes of medical importance. (3 marks)
10. Which are the THREE species of parasitic lice of humans? Include full scientific names. (3 marks)

SECTION B (40 Marks)

11. Compare the different morphologies of malarial parasites and their impact on malaria diagnosis.
(20 marks)
12. Describe the major *Leishmania* species and their public health menace worldwide. (20 marks)
13. Give an account of an example zoonosis and how it can be managed to prevent, control, and treat the diseases they may transmit to humans. (20 marks)
14. Discuss arthropods that infest domestic animals and strategies to control them. (20 marks)