



**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**  
**3<sup>RD</sup> YEAR 2<sup>ND</sup> SEMESTER 2023/2024 ACADEMIC YEAR**  
**MAIN**

---

**COURSE CODE:** HCB 9302

**COURSE TITLE:** MEDICAL PARASITOLOGY

**EXAM VENUE:** STREAM: (BSc. Env. Hlth /Com Health and Dev)

**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. Briefly describe the life cycle of *Plasmodium falciparum* only in the invertebrate host. (3 marks)

2. List and describe the pathogenesis of two parasitic protozoa frequently found in immune-compromised individuals: (3 marks)
3. Giving TWO examples of parasites in each case, distinguish between definitive host and intermediate host. (3 marks)
4. Giving one example each, briefly explain the difference between Cestodes, Nematodes and Trematodes. (3 marks)
5. Giving an example of a parasite in each case, explain FOUR mechanisms by which parasite evade host immune defense system (3 marks)
6. Distinguish between Excystation and Encystation. (3 marks)
7. Distinguish between American, West African and East African trypanosomiasis. (3 marks)
8. Describe reactions that occur in the body of the host following parasitic invasion (3 marks)
9. What are the ecological advantages of Protozoa? (3 marks)
10. State THREE conditions or diseases which *Entamoeba histolytica* may cause. (3 marks)

**SECTION B (40 Marks)**

1. Describe TWO parasitic zoonotic infections of human (one protozoan and another helminthic). Explain why zoonotic infections are generally difficult to control? (20 marks)
2. The prevalence of intestinal parasitic infections reflects the levels of personal and general hygiene within a community. True or false? Explain your answer using two relevant protozoal infections and three helminthic infections ( 1 cestode, 1 trematode, and 1 nematode)? (20 marks)
3. Describe the life cycle of a named Cestode (use its scientific name). (20 marks)
4. Give an account of ways in which medical vectors of zoonoses can be managed to prevent, control, and treat the diseases they may transmit to humans. (20 marks)