



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY  
SCHOOL OF HEALTH SCIENCES**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN  
PUBLIC & COMMUNITY HEALTH**

**2<sup>ND</sup> YEAR 2<sup>ND</sup> SEMESTER 2016/2017**

**KISUMU LEARNING CENTRE**

---

**COURSE CODE: HCD 3227**

**COURSE TITLE: MEDICAL PARASITOLOGY AND ENTOMOLOGY**

**EXAM VENUE:**

**STREAM:**

**DATE:**

**EXAM SESSION**

**TIME: 2 HOURS**

---

**Instructions:**

- 1. Answer all questions in Section A and any other 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

### ANSWER ALL THE QUESTIONS (30mks)

1. State the differences between insects and arachnids (4mks)
2. Compare and contrast between *Wuchereria bancrofti* and *Plasmodium falciparum* (4 mks)
3. State three ways of preventing infection with *Taenia saginata* (3 mks)
4. Briefly explain four types of symbiotic relationships (4mks)
5. State two differences between biological vectors and mechanical vectors (4 mks)
6. Briefly discuss on the direct and indirect mode of transmission (4 mks)
7. State three features that accounts for the high prevalence of *Ascaris lumbricoides* (3mks)
8. Briefly describe the life cycle of *Plasmodium falciparum* in humans (4mks)

## SECTION B

### ANSWER ANY TWO QUESTIONS FROM THIS SECTION (40 MKS)

1. a) Briefly explain the mechanisms used by parasites that allows them to avoid recognition by the immune competent host (10mks)  
b) Describe morphology, life cycle, pathogenicity of *Entamoeba histolytica* (10mks)
2. Compare and contrast hookworm disease and *Echinococcus granulosus* in terms of etiology, risk factors, control and prevention measures (15 mks)  
b) Compare and contrast the life cycle of *Culex* and *Anopheles* mosquito (5 mks)
3. a) Describe the epidemiology, life cycle, treatment, prevention and control of *Fasciola hepatica* (15 mks)  
b) State the adaptations of *Fasciola hepatica* to parasitism (5 mks)
4. a) Discuss on integrated vector management (16 mks)  
b) Explain 4 barriers to malaria control (4 mks)