



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF HEALTH SCIENCES

**UNIVERSITY EXAMINATION FOR THE CERTIFICATE IN COMMUNITY HEALTH
AND DEVELOPMENT**

1ST YEAR 1ST SEMESTER 2018/2019 ACADEMIC YEAR

KISUMU LEARNING CENTRE

COURSE CODE: HCD 1112

**COURSE TITLE: INTRODUCTION TO INVERTEBRATES OF MEDICAL
IMPORTANCE**

EXAM VENUE:

STREAM: CERTIFICATE

DATE: 23/4/19

EXAM SESSION: 12.00 – 1.30PM

TIME: 1 ½ 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 IN THIS SECTION (30 MKS)

1. Identify the infective stage of the following parasites;
 - a) *Leishmania donovani*
 - b) *Plasmodium falciparum*
 - c) *Giardia intestinalis* (3mks)
2. State any two types of life cycle (2 mks)
3. Name three specimens used in diagnosis of parasites (3 mks)
4. Name three routes used by the parasite to get into the body of the host (3 mks)
5. Define symbiosis and state and explain two types of such relationship (4mks)
6. State three major stages in the life cycle of nematodes (3 mks)
7. State three characteristics of cestodes (3 mks)
8. State three morphological characteristics of arthropods (3 mks)
9. State on one medical importance of cockroaches (1 mk)
10. State the medical importance of flies (3 mks)
11. State two characteristics of *Plasmodium falciparum* (2 mks)

SECTION B: ANSWER ANY TWO QUESTIONS IN THIS SECTION (40 MKS)

1.
 - a) Describe the mode of transmission, morphology, site of infection, life cycle , treatment and control of infections by *Entamoeba histolytica* (15 mks)
 - b) Discuss on the methods of reducing infections by *Schistosoma mansoni* (5 mks)
2.
 - a) Describe the life cycle, epidemiology treatment of infection by *Trypanosoma brucei* (10 mks)
 - b) Identify at least five vector borne diseases together with their respective vectors and parasites (10 mks)
3.
 - a) Discuss on any five association between organisms in ecology (10 mks)
 - b) List and explain some of the five adaptations of the invertebrates that has ensured their survival in the environment (10 marks)
4. Discuss on the different type of parasites and hosts (20 mks)