



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF HEALTH SCIENCES**  
**UNIVERSITY EXAMINATION FOR THE DEGREE COMMUNITY HEALTH AND**  
**DEVELOPMENT/ PUBLIC HEALTH**  
**2<sup>ND</sup> YEAR 2<sup>ND</sup> SEMESTER 2018/2019 ACADEMIC YEAR**  
**NAIROBI CITY CAMPUS**

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**COURSE TITLE: MEDICAL ENTOMOLOGY**

**COURSE CODE: HCD 3227**

**VENUE: 9<sup>TH</sup> FLOOR ROOM 2**

**DATE: 19 /12/2018**

**EXAM SESSION 9PM -11PM**

**TIME: 2 HOURS**

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**Instructions**

1. Answer question 1 (compulsory) and ANY other 2 questions.
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.

QUESTION ONE 30marks

- a) What is medical entomology? 2marks
- b) Giving an example in each case, differentiate between cyclopropagative and transovarian disease transmission; 4marks
- c) Name THREE classes of medically important Arthropods 3marks
- d) Name the vectors responsible for the transmission of the following diseases; 4marks
  - i. Lymphatic filariasis
  - ii. Leishmaniasis
  - iii. Loiasis
  - iv. Onchocerciasis
  - v. African trypanosomiasis
- e) List any THREE mosquito-borne viral diseases 3marks
- f) Describe the life cycle of anopheles and culex mosquitoes 4marks
- g) What is “complete” and “incomplete” metamorphosis in the insect life cycle, give an example in each case? 3marks
- h) Briefly describe two methods used for controlling Glossina 2marks
- i) What is the cause of “Delusory parasitoses”? 4 marks

QUESTION TWO 20marks

Discuss the medical importance of arthropods

QUESTION THREE 20 marks

- a) Discuss control measures for the following; 15marks
  - i) Mosquitoes
  - ii) Ticks
  - iii) Bedbugs

Discuss the economic importance of arthropods 5marks

QUESTION FOUR 20marks

Discuss the main differences between Anopheles and Culex mosquitoes in relation to their habits and breeding sites

QUESTION FIVE

Describe the life cycle of the snail-borne schistosomiasis infection, both in the snail intermediate host and the human definitive host.