



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF HEALTH SCIENCES**  
**UNIVERSITY EXAMINATION FOR MASTER OF BIOMEDICAL SCIENCES**  
**(PARASITOLOGY)**  
**1<sup>st</sup> YEAR 2<sup>nd</sup> SEMESTER 2023/2024 ACADEMIC YEAR**  
**KISUMUCAMPUS**

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**COURSE CODE: HME 5122:**

**COURSE TITLE: CONTROL OF INSECTS AND VECTORS OF MEDICAL IMPORTANCE**

**EXAM VENUE:**

**DATE:**

**TIME: 3.00 HOURS**

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**Instructions:**

- 1. Question 1 is compulsory then answer any other 3 the questions.**

1. Answer all questions here (COMPULSORY)
  - a) Discuss the intricate dance between form and function: How mosquitoes' features can guide control strategies (5 marks).
  - b) Explore the potential role of climate change in altering the geographical distribution and transmission dynamics of vector-borne diseases and its implications for control strategies (5 marks).
  - c) Discuss the significance of controlling insects and vectors of medical importance in public health and impact of vector-borne diseases on human populations and the environment ( 5 marks)

**Answer any 3 questions**

2. Discuss the Four-Tiered Integrated Pest Management Implementation Approach (15 marks).
3. Discuss traditional methods of vector control (15 marks)
4. Discuss modern methods of vector control (15 marks).
5. Discuss limitations of insecticides (15 marks)
6. Discuss use of Wolbachia in Vector control (15 marks).