



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES

**UNIVERSITY RESIT EXAMINATION FOR THE DEGREE OF BACHELOR OF
BIOLOGICAL SCIENCES AND EDUCATION (SCIENCE) WITH IT**

COURSE CODE: SZL 408

COURSE TITLE: GENERAL ENTOMOLOGY

Instructions:

- 1. Answer ALL questions in Section A and any two questions in Section B**

SECTION A: Short Answer Questions (30 marks)

1. Name the parasite and vector responsible for the following diseases in humans

(3 marks)

Disease	Parasite	Vector
Filariasis		
Leishmaniasis		
Onchocerciasis		

2. List three major methods of malaria transmission in human beings (3 marks)
3. Compare the feeding habits of mosquitoes and sand flies (3 marks)
4. List three species of parasites that cause malaria in man (3 marks)
5. Differentiate between J- and S-shaped population growth curves (3 mark)
6. Based on chemical nature of compounds list three main groups of insecticides used to control insects of agricultural and public health importance (3 marks)
7. Describe three potential evolutionary outcomes of interspecific competition among insects (3 marks)
8. Outline three properties of a perfect insecticide (3 marks)
9. Describe major components of atypical population system (3marks)
10. State three differences between the two forms of *Leshmania* parasites (3 marks)

SECTION B: Essay Questions (40 marks)

11. Discuss the life cycle and behavior of tsetse flies (20 marks)
12. The numbers of insect vector populations fluctuate over time and in space. Discuss. (20 marks)
13. Using specific examples, describe methods used to manage insect vectors in Africa (20 marks)
14. Describe features that contribute to the success of animals that display r- and k-selection strategies (20 marks)