

**UNIVERSITY EXAMINATION  
JARAMOGI OGINGA ODINGA UNIVERSITY (BUSIA LEARNING CENTRE)**

**CODE HCD 2114: INTRODUCTION TO MEDICAL ENTOMOLOGY AND PARASITOLOGY**

**Answer ALL questions in Section A and ANY TWO questions in Section B**

**Section A 30 Marks**

1. Define the following terms
  - a) Vector
  - b) Host
  - c) Obligate parasites (**3 marks**).
  
2. The phylum Arthropoda consists of four classes. List three of the classes that are found in this phylum (**3 marks**).
  
3. List at least three benefits and three harmful effects of insects to man (**3 marks**).
  
4. Define the term Metamorphosis. Name two insects that undergo complete metamorphosis (**3 marks**).
  
5. Protozoa are single cell organisms that contain important parasites of humans. There are six phyla of protozoa that contain parasites of medical importance. Name at least three of the phyla (**3 marks**).
  
6. An insects' body is divided into three parts. List their names and name at least one appendage that is found on each division (**3 marks**).
  
7. Describe two basic differences that are used to differentiate Ticks from insects (**3 marks**).
  
8. Malaria is a vector born disease that is transmitted from person to person by vectors. Name the genus of the **parasite** that causes malaria. Name the **definitive** and **intermediate** hosts of the malaria parasite (**3 marks**).
  
9. Name the definitive and alternative hosts of the following parasite: *Taenia solium* and *Taenia saginata* (**3 marks**).
  
10. Name at least one disease that is transmitted by the following vectors: Hard ticks, soft Ticks and subcutaneous tissue Mites (**3 marks**).

**SECTION B. ANSWER ANY TWO QUESTIONS (30Marks)**

1. Describe **ANY** one of the following diseases. Giardiasis **OR** Trichomoniasis. What is the etiological agent and mode of transmission? Describe prevention method and treatment (**15 marks**).
2. Reproduction in insects and mites can occur in a wide variety of forms. Describe the following forms of reproduction in insects and mites.
  - a) Sexual reproduction (**5 marks**)
  - b) Parthenogenesis (**5 marks**)
  - c) Viviparity (**5 marks**).
3. Describe the medical importance of the following insects.
  - a) Houseflies *Musca domestica* (**5 marks**)
  - b) Tsetseflies *Glossina sps*(**5 marks**)
  - c) Cockroaches (**5 marks**)
4. Define Schistosomiasis. What are the causal agents of these infections in humans. State mode of transmission and prevention for Schistosomiasis (**15 marks**)