

UNIVERSITY EXAMINATION

COURSE CODE HDC 2114: INTRODUCTION TO MEDICAL PARASITOLOGY AND ENTOMOLOGY.

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

SECTION A (30 marks)

- 1.) Define the following terms
 - A) A vector
 - B) Endoparasite
 - C) Obligate parasite (3 marks)
- 2.) Give an example of one parasite that is transmitted by the following routes
 - A) Oral faecal
 - B) Sexual contact
 - C) Blood transfusion (3 marks).
- 3.) Give an example of parasitic protozoa that move by the following means
 - a. Extension of pseudopod
 - b. Flagellum
 - c. Cilia (3 marks)
4. Name one important difference that is used to classify human parasitic organisms into 2 sub-kingdoms: protozoa and metazoa (3 marks).
5. Name one arthropod of medical importance that is found in the class Arachnida and the disease they transmit to both humans and animals (3 marks).
6. Name important features that are used to distinguish the class Insecta from the class Arachnida in the phylum Arthropoda (3 marks).
7. Name one viral disease that is transmitted by the *Aedes* mosquitoes (3 marks).
8. Name one arthropod vector that spends most of its larval stage in the mothers' uterus (3 marks).
9. Name the infective stage in Schistosomiasis that is transmitted to humans by snails *Bulinus* sps (3 marks).
10. Describe one important method that is used to treat scabies mites (*Sarcoptes* sps) (3 marks)

SECTION 2. ANSWER ANY TWO QUESTIONS (30 marks)

1. Describe reproduction mechanisms in protozoa (15 Marks).
2. Describe the mode of transmission of the following parasites
 - a. *Plasmodium falciparum*
 - b. *Giardia lamblia*
 - c. *Trichomonas vaginalis* (15 Marks).
3. Describe two physical and chemical methods that are used to control the following arthropod vectors.
 - a. Common house flies (*Musca domestica*).
 - b. Common house Cockroaches (*Periplaneta*, *Blatta* and *Blattella* sps) (15 Marks).
4. Describe the life cycle and medical importance of any one of the following insects: (a) Tsetseflies (*Glossina* sps) (b) The human body louse (*Pediculus humanus humanus*) (c) Fleas (*Xenopsylla cheopis* or *Tunga penetrans*) (15 Marks).