

LAIKIPIA



UNIVERSITY

UNIVERSITY EXAMINATIONS

SECOND SEMESTER 2023/2024 ACADEMIC YEAR

**THIRD YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF EDUCATION (SCIENCE)**

ZOOL 322: HELMINTHOLOGY

STREAM: R

TIME: 2 HRS

DAY: TUESDAY [11.30A.M – 1.30P.M]

DATE: 09/04/2024

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.



Instructions

Answer all questions in Section A and any **TWO** in Section B
 Section A is **40 marks** and Section B is **30 marks**

SECTION A (40 MARKS)**QUESTION ONE**

Match the following helminthic parasite to their vector and where adult form is found in the definitive host
(8 Marks)

	intermediate host	Site in the Definitive host
<i>Hymenolepis nana</i>		
<i>Schistosoma haematobium</i>		
<i>Onchocerca volvulus</i>		
<i>Druncuculus medinensis</i>		

QUESTION TWO

- a) Using a well labelled diagram, describe the digestive tract of hermaphroditic trematodes and what differentiates it with that of dioecious trematodes **(5 Marks)**
- b) Define diagnosis and explain its importance in managing parasitic infections **(3 Marks)**

QUESTION THREE

Contrast the risks of *T solium* with that of *T saginata* **(3 Marks)**

- a) Describe the clinical symptoms of liver fasciolosis infection **(3 Marks)**
- b) Explain how livestock can be protected against parasitic trematodes **(4 Marks)**

QUESTION FOUR

- a) Briefly describe the life cycle of hookworms **(4 Marks)**
- b) Name two species of hookworms that affect humans **(2 Marks)**

QUESTION FIVE

Explain why infection with 100 *Ancylostoma duodenale* potentially more serious than an infection with 100 *Necator americanus*?

(2 Marks)

QUESTION SIX

Discuss life cycle adaptation of parasitic helminths

(6 Marks)

SECTION B (30 MARKS)

QUESTION SEVEN

Discuss the life cycle and pathology of *Dipilobothrium latum* infection

(15 Marks)

QUESTION EIGHT

Discuss immune defence of vertebrate host against parasites and how they evade these mechanisms

(15 Marks)

QUESTION NINE

Explain the clinical manifestation of *Wuchereria bancrofti*

(6 Marks)

b) Describe diagnosis of Bancroftian infection

(2 Marks)

b) Discuss in detail giving examples the factors that help maintenance of parasitic helminths in the population

(7 Marks)