



UNIVERSITY EXAMINATIONS

SECOND SEMESTER 2023/2024 ACADEMIC YEAR

**SECOND YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF BIOMEDICAL SCIENCE AND
TECHNOLOGY (BMED)**

BMED 226: MEDICAL HELMINTHOLOGY

STREAM: R

TIME: 2 HRS

DAY: WEDNESDAY[2.30P.M - 4.30P.M] DATE: 17/04/2024

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 **40 marks**

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

Briefly explain the following terms

- a) Parasitism (2 Marks)
- b) Larval classical migration (2 Marks)
- c) Paratenic host (1 Mark)

QUESTION TWO

With named examples, briefly explain host immune evasion by parasitic helminth infections evade host immune system (5 Marks)

QUESTION THREE

Briefly describe the clinical manifestations and laboratory diagnosis of *Diphyllobothrium latum* (5 Marks)

QUESTION FOUR

Explain giving example microfilarial periodicity (3 Marks)

- a) Give reasons on some filarial worms are sheathed (2 Marks)

QUESTION FIVE

Name the parasite that causes dracunculiasis (1 Mark)

- a) Outline features that distinguish the worm that causes dracunculiasis from filarial worms (2 Marks)
- b) Highlight the reasons for success in eradication of dracunculiasis (3 Marks)
- c) Citing morphological features, distinguish a trematode from a nematode (4 Marks)

QUESTION SIX

Compare and contrast the life cycles of *Trichuris trichiura* and *Trichinella spiralis* (3 Marks)

QUESTION SEVEN

Explain the mechanisms by which parasitic helminths cause disease in definitive host (4 Marks)

QUESTION EIGHT

Describe factors that contribute to helminth parasite burden in school going children (3 Marks)



SECTION B (30 MARKS)

QUESTION NINE (15MARKS)

Discuss the pathogenesis of schistosomiasis in man

(15 Marks)

QUESTION TEN (15 MARKS)

Write short notes on biochemical and physiological adaptation of helminth to parasitic way of life

(15 Marks)

QUESTION ELEVEN (15 MARKS)

Discuss the life cycle of *Strongyloides stercoralis* and explain its control and management

(15 Marks)

