



UNIVERSITY EXAMINATIONS

**THIRD YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF
BACHELOR OF SCIENCE IN ZOOLOGY
SECOND SEMESTER 2022/2023
[JANUARY-APRIL, 2023]**

ZOOL 341: HELMINTOLOGY

STREAM: Y3S2

TIME: 2 HOURS

DAY: TUESDAY, 3:00 – 5:00 PM

DATE: 18/04/2023

INSTRUCTIONS

- 1. Do not write anything on this question paper.**
- 2. Answer Question ONE and any TWO other Questions in Section B.**

SECTION A 40 MARKS (ANSWER ALL QUESTIONS)

Question 1

Give one example in each case of

- | | |
|-------------------|---------|
| (a) Commensalism, | (1mark) |
| (b) Symbiosis | (1mark) |
| (c) Mutualism | (1mark) |

Question 2

Name three major groups of helminths containing members that have man as their main host. (3 marks)

Question 3

Distinctions between *Fasciola hepatica* and *F. gigantica*. (3marks)

Question 4

Briefly explain the following types of hosts; reservoir, accidental, definitive and intermediate hosts. (4 marks)

Question 5

State the disease caused by the following parasites. (5 marks)

- a. *Wuchereria bancrofti*
- b. *Onchocerca volvulus*
- c. *Dracunculus medinensis*
- d. Anisakiasis
- e. *Paragonimus westermani*

Question 6

Giving one example in each case classify the digeneans based on their locations in the definitive hosts. (5 marks)

Question 7

- a. State the morphological differences between *Ancylostoma duodenale* and *Necator americanus* species of hookworms. (5 marks)
- b. Apart from subclass Digenea, state other two subclasses of class Trematoda. (2 marks)

Question 8

Outline five comparative features of the following human schistosome species: *Schistosoma mansoni*, *S. haematobium* and *S. japonicum*. (10 marks)

SECTION B 30 MARKS (ANSWER ANY TWO QUESTIONS)

Question 9

Cercaria is one of the larval digeneans, with aid of illustrations where necessary explain various types of cercariae. (15marks)

Question 10

- a) Outline the major differences between *Taenia saginata* and *T. solium*. (5 marks)
- b) Give a concise description of the various larval forms of cestodes. (10marks)

Question 11

Discuss the life cycle of *Ascaris lumbricoides*. (15marks)