



MACHAKOS UNIVERSITY

University Examinations 2022/2023 academic Year

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (BIOLOGY)

SZL406 UNIT NAME MEDICAL HELMINTHOLOGY

DATE:

TIME:

Instructions

1. Answer Question 1 (**compulsory**) and **any other two** questions
2. Use clean well labelled diagrams wherever appropriate.

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Describe how infection to man by the parasite *Taenia solium* can be avoided (3 marks)
- b) Explain the predisposing factors to infection by *Echinococcus granulosus* in man (3 marks)
- c) Illustrate the structure of a mature proglottid of a tape worm (3 marks)
- d) Explain the pathogenicity of the hydatid cyst in man (3 marks)
- e) Outline the methods of infection to man by *Tichuris trichura*. (3 marks)
- f) Explain the adaptations of trematodes to a parasitic mode of life (3 marks)
- g) Explain the epidemiology of schistosomiasis in Kenya. (3 marks)
- h) Briefly describe sexual reproduction in *Schistosoma mansoni* (3 marks)
- i) Briefly discuss the modes of reproduction in tape worms (3 marks)
- j) Explain any three methods of prevention of infection by *Trichinella spiralis* (3 marks)

QUESTION TWO (20 MARKS)

Discuss the epidemiology and current management approaches of Bancroftian Filariasis in Kenya

QUESTION THREE (20 MARKS)

Classify and characterize the pathogenic platyhelminthes of medical importance

QUESTION FOUR (20 MARKS)

- a) Outline the general life cycle of nematodes (8 marks)
- b) Trace the life cycle of a named nematode with a migratory nature in man (12 marks)

QUESTION FIVE (20 MARKS)

Discuss the lifecycle of *Fasciola hepatica*