



MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (BIOLOGY)

SZL406 MEDICAL HELMINTHOLOGY

DATE: 10/12/2021

TIME : 11.00-1.00 PM

INSTRUCTIONS

Answer Question 1 and any other two questions

Illustrate your answer with clean labelled diagrams wherever appropriate

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain a medical laboratory procedure used to diagnose anaemia. (3 marks)
- b) Explain the symptoms characteristic to infections by pinworms in man. (3 marks)
- c) Explain predisposing factors to infection of any three named cestodes to man. (3 marks)
- d) Discuss the indirect transmission of any three helminths to man. (3 marks)
- e) Explain the pathology caused by a filaria worm. (3 marks)
- f) Explain the preventive management of *Schistosoma haematobium* infections to man. (3 marks)
- g) Classify the major phyla to which helminths infectious to man belong. (3 marks)
- h) Explain the pathogenicity of a heavy infestation by *Taenia saginata* in man. (3 marks)
- i) Fill the table (3 marks)

Cestode	Infective stage	Predilection site
i.		
ii.		
iii.		

- j) Explain the adaptations of tapeworms to a parasitic mode of life. (3 marks)

QUESTION TWO (20 MARKS)

- a) Discuss the life cycle of the Lancet fluke *Dicrocoelium dendriticum* (16 marks)
b) Discuss the pathology and pathogenicity of this parasite *D. dendriticum* (4 marks)

QUESTION THREE (20 MARKS)

Using specific examples, discuss the management of helminthic infections in man. (20 marks)

QUESTION FOUR (20 MARKS)

- a) Discuss the role of arthropods in the epidemiology of helminthic infections. (10 marks)
b) Discuss a laboratory diagnosis of helminthic infections in man. (10 marks)

QUESTION FIVE (20 MARKS)

Discuss the transmission and pathology of the round worm *Ascaris lumbricoides*.

