



WI-2-60-1-6

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
UNIVERSITY EXAMINATIONS 2023/2024
EXAMINATION

TPE 3101: MEDICAL HELMINTHOLOGY

DATE: AUGUST 2024

TIME: 3 HOURS

INSTRUCTIONS: ANSWER ANY FOUR OUT OF THE SIX QUESTIONS

1. The implementation of the National School-Based Deworming Programme for the control of soil-transmitted helminths (STHs) in Kenya has led to a substantial reduction in the prevalence and intensity of STHs. However, STHs still remains a major public health in Kenya. What are the challenges facing this Programme (25 marks)

2. a) The understanding of the life cycle and epidemiology of a particular pathogen is crucial for its prevention and control. Using *Taenia solium* as an example discuss this statement (15 marks)

- b) Name the main body parts of an adult tapeworm and state their functions (10 marks)

3. a) Describe the role of reservoir hosts and water resources development projects on spread of schistosomiasis (15 Marks)

- b) Discuss pathogenesis and clinical manifestation of intestinal schistosomiasis (10 marks)

4. a) Describe the life cycle and pathogenesis of *Paragonimus westermani* (15 Marks)

- b) Explain in detail, the five abiotic factors that influence distribution of snails of medical importance in Africa (10 Marks)

5. Briefly describe the following:
 - a) The life cycle and the clinical manifestation of Loiasis (15mks)

 - b) Key control measures for the prevention and control of Dracunculiasis (10mks)

6. a) How can Polymerase Chain Reaction (PCR) be applied in helminthology (15 marks).

- b) Name the three major steps of PCR and state their functions (10 marks)