



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (BIOLOGY)

SZL 406: MEDICAL HELMINTHOLOGY

DATE: 19/10/2020

TIME: 8:30 – 10:30 AM

INSTRUCTIONS

1. Answer Question 1 (compulsory) and **any two** questions in Section B.
2. Clearly and cleanly illustrate your answer as appropriate.

SECTION A: COMPULSORY

QUESTION ONE (30 MARKS)

- a) Explain the factors that predispose man to Hydatidosis (3 marks)
- b) State the predilection site and infective stage of the following human parasites (3 marks)
 - i) *Haemonchus contortus*
 - ii) *Fasciola hepatica*
 - iii) *Schistosoma haematobium*
- c) Illustrate the structure of the scolex of *Taenia saginata* (3 marks)
- d) Briefly describe the term 'Tapeworm appetite' (3 marks)
- e) Explain any three methods of prevention of infection by *Schistosoma haematobium* (3 marks)
- f) Explain the pathogenesis of *Taenia saginata* in man (3 marks)
- g) Explain the symptoms characteristic to infections by pinworms in man
- h) Explain the predisposing factors to infection of nematodes to man (3 marks)
- i) Highlight the key characteristics of Schistosomes (3 marks)
- j) Describe how man gets infected with the Lancet fluke (3 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

QUESTION TWO (20 MARKS)

- a) Discuss briefly contemporary method of managing filariasis in Kenya (8 marks)
- b) Describe a laboratory procedure for diagnosing anaemia (12 marks)

QUESTION THREE (20 MARKS)

Compare the lifecycles of the parasites of fascioliasis and schistosomiasis

QUESTION FOUR (20 MARKS)

- a) Discuss the epidemiology and management of lymphatic filariasis in Kenya (12 marks)
- b) Discuss the lifecycle of *Ascaris lumbricoides* (8 marks)

QUESTION FIVE (20 MARKS)

Discuss the role of arthropods in the epidemiology of helminthic infections in man