

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**SECOND YEAR EXAMINATION FOR THE AWARD OF DEGREE
OF BACHELOR OF SCIENCE IN BIOMEDICAL SCIENCE & TECHNOLOGY**

BMET 233: MEDICAL HELMINTHOLOGY

STREAMS: BSC (BMET) Y2S2

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 15/04/2020

11.30 A.M. – 1.30 P.M.

INSTRUCTIONS: Answer question ONE and any other TWO questions

QUESTION 1 (COMPULSORY) (30 MARKS)

- a) Outline 4 factors which influence distribution of helminthes. (4 marks)
- b) Describe 5 ways through which humans get exposed to helminthes. (5 marks)
- c) A 12-year-old male was brought in by his mother for evaluation of diarrhea and crampy abdominal -pain of 2 weeks duration. That morning he had an "accident" in his pants and saw something move. His mother thought it was an earthworm. He had no fever, cough, or hemoptysis. His physical examination was unremarkable. The family had recently moved from slums.
 - (i) What is the differential diagnosis in this case? (5 marks)
 - (ii) How would you establish the diagnosis? (2 marks)
- d) Describe the life cycle of *Strongyloidesstercoralis*. (6 marks)
- e) Outline 5 ways through whichonchocerciasis disease can be prevented. (5 marks)
- f) Highlight 3 differences between *Hymenolepisdiminuta*and *Hymenolepis nana*. (3 marks)

QUESTION 2 (20 MARKS)

- a) Describe the life cycle and clinical features of *Drancunculus medinensis* infection. (10 marks)
- b) (i) Name the etiologic agent for trichinosis. (1 mark)
- (ii) Discuss the pathogenicity, life cycle and clinical features for the infection caused by the parasite named in (i) above. (9 marks)

QUESTION 3 (20 MARKS)

- a) Describe, in detail, the life cycle, pathogenicity and prevention of *Taenia signata*. (10 marks)
- b) State 5 medically important species of schistosomes and indicate the diseases they cause in man. (10 marks)

QUESTION 4 (20 MARKS)

- a) Describe life cycle, pathogenicity, clinical features, diagnosis and treatment of *Ascaris Lumbricoides*. (10 marks)
- b) Discuss mode of transmission, pathogenesis and diagnosis of *Wuchereria bancrofti*. (10 marks)
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