



MACHAKOS UNIVERSITY

University Examinations for 2021/2022

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

THIRD YEAR SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN BIOLOGY

BACHELOR OF SCIENCE (AGRICULTURAL EDUCATION AND EXTENSION)

SZL 315: INTRODUCTION TO PARASITOLOGY

DATE: 15/3/2022

TIME : 2:00 – 4:00 PM

INSTRUCTIONS

Answer all the questions Question 1 and Any 2 questions in Section B

QUESTION ONE (30 MARKS)

- i. Describe epidemiology, mode of feeding and symptom of *Ancylostoma duodenale* (3 marks)
- ii. You have been employed as consultant with International Organisation for Epizoonotic parasites to help formulate budget allocations for the following parasitic diseases across the globe: Schistosoma, Amoebiasis and Druncunculiasis. State and support your priorities in budget allocations (3 marks)
- iii. Describe the disease triad in parasitology (3 marks)
- iv. Describe virulence of parasites (3 marks)
- v. Describe the two major life stages of protozoans (3 marks)
- vi. Distinguish two types of sexual reproductions in parasites (3 marks)
- vii. Describe PAME (3 marks)
- viii. Describe the exo-erythrocytic stage of *Plasmodium falciparum* (3 marks)
- ix. Schematic describe the life cycle of *Wuchereria bancrofti* (3 marks)
- x. Describe the Cercarie and Miracidium stages of *Schistosoma* (3 marks)

Section B

Question 2

Discuss the epidemiology, morphology and diseases of *Entamoeba histolytica* (20 marks)

Question 3

Describe features of the Life Cycle of Roundworms (8 marks)

Discuss the generalised concept of the parasites life cycle

(12 marks)

Question 4

Discuss non-specific host resistance methods to parasites

(6 marks)

Discuss the diversity of protozoan parasites using a well labelled diagram

(14 marks)

Question 5

Discuss diagnosis methods for parasitic diseases

(4 marks)

Discuss by classifying major Eucaryotic parasites based on their unique features

(16 marks)