



MACHAKOS UNIVERSITY

University Examinations for 2024/2025 Academic Year

SCHOOL OF PURE AND APPLIED SCIENCES
DEPARTMENT OF BIOLOGICAL SCIENCES

THIRD YEAR FIRST SEMESTER EXAMINATION FOR DEGREE IN
BACHELOR OF SCIENCE IN BIOLOGY
BACHELOR OF SCIENCE (AGRICULTURAL EXT & EDU)

SZL315: INTRODUCTION TO PARASITOLOGY

DATE: 20TH JANUARY, 2025

TIME: 11.00 AM – 1.00 PM

INSTRUCTIONS:

- Answer question **ONE (Compulsory)** and **any other TWO** questions
- Use clean well labelled diagrams wherever appropriate

QUESTION ONE (30 MARKS)

- Describe the necessity of parasitic life cycle. (3 marks)
- Describe the sexual reproductions in protozoan parasites. (3 marks)
- Classify parasites based on the sites of their habitats in the Host. (3 marks)
- Outline three important features of *Giardia lamblia*. (3 marks)
- Describe disease caused by *Naegleria fowleri*. (3marks)
- Identify three parasites species and the type of Cutaneous Leishmaniasis that they cause. (3marks)
- Outline two clinical features and transmission of the parasite *Cyclospora cayetanensis*. (3 marks)
- Describe three morphological features of *Trichomonas vaginalis*. (3 marks)
- Differentiate between R- and K-Strategy of parasitic survival. (3marks)
- Identify three *Schistosoma spp* and the disease they cause. (3 marks)

QUESTION TWO (20 MARKS)

Discuss the morphology of the trophozoite of *Entamoeba histolytica* and *Entamoeba Hartmannii*.

QUESTION THREE (20 MARKS)

Discuss the life cycle of the parasite *Plasmodium falciparum*.

QUESTION FOUR (20 MARKS)

- a) Distinguish between Trematodes and Nematodes based of 5 distinctive features. (10 marks)
- b) Discuss the life cycle of *Theileria parva*. (10 marks)

QUESTION FIVE (20 MARKS)

- a) Describe the life cycle of *Ancylostoma duodenale* (8 marks)
- b) Describe the life cycle of *Trypanosoma brucei* (12 marks)