



MACHAKOS UNIVERSITY

University Examinations for 2024/2025 Academic Year

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE (BIOLOGY)

SZL405 : MEDICAL PROTOZOLOGY

DATE: 17TH JANUARY, 2025

TIME: 2.00 PM – 4.00 PM

INSTRUCTIONS:

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

QUESTION ONE (30 MARKS)

- a) Differentiate between Chagas disease and African trypanosomiasis. (3 marks)
- b) Distinguish between mechanical and cyclical transmission of protozoans between two hosts. (3 marks)
- c) Explain two methods of managing gastro-intestinal infections in man. (3 marks)
- d) Outline the infection to man by *Cryptosporidia*. (3 marks)
- e) Illustrate the morphology of a named zoomastigophoran that is infectious to man. (3 marks)
- f) Outline 'polymorphic trypanosomes'. (3 marks)
- g) Characterize the sporogonic lifecycle of the malaria parasite. (3 marks)
- h) Explain the tissue damage due to infection by *Entamoeba histolytica* in Man. (3 marks)
- i) Explain how use of insecticide treated bednets assist in managing malaria (3 marks)
- j) Characterize infections to man by *Leishmania donovani*. (3 marks)

QUESTION TWO (20 MARKS)

Discuss why Malaria is still a killer today despite current advances in disease management.

QUESTION THREE (20 MARKS)

Discuss the epidemiology of any three vector borne protozoal diseases of medical importance.

QUESTION FOUR (20 MARKS)

Classify and discuss the Kingdom Protista that are of medical importance.

QUESTION FIVE (20 MARKS)

Discuss the infection by Balantidiosis to man and how it can be managed.