



MACHAKOS UNIVERSITY

University Examinations for 2022/2023 Academic Year

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

**FOURTH YEAR SPECIAL / SUPPLEMENTARY EXAMINATION FOR
BACHELOR OF SCIENCE IN BIOLOGY**

SZL 405: MEDICAL PROTOZOOLOGY

DATE: 9/3/2023

TIME : 8.30 – 10.30 AM

INSTRUCTIONS

- a) Answer question 1 (compulsory) and any other two questions;
- b) Illustrate your answers with diagrams wherever appropriate.

QUESTION ONE (30 MARKS)

- a) Illustrate the structure of *a* named protozoan of medical importance (3 marks)
- b) Briefly explain how *Toxoplasma gondii* infects man (3 marks)
- c) Outline the methods of asexual reproduction amongst pathogenic protists (3 marks)
- d) Explain factors that predispose man to suffer from Leishmaniasis (3 marks)
- e) Explain the locomotory structures present in parasitic protozoa (3 marks)
- f) Outline three positive economic importance of protozoan parasites (3 marks)
- g) Briefly explain the management of intestinal Coccidia (3 marks)
- h) Briefly discuss any three management practices of intestinal protozoa (3 marks)
- i) Discuss how malaria is transmitted to man (3 marks)
- j) Explain the infections of the human brain by any three protozoans (3 marks)

QUESTION TWO (20 MARKS)

Discuss the life cycle of a named malaria parasite. (20 marks)

QUESTION THREE (20 MARKS)

- a) Explain factors that promote drug resistance to *Plasmodium falciparum* 8 marks
- b) Explain the mechanisms of prevention of protistan infections to man from domestic canidae (12 marks)

QUESTION FOUR (20 MARKS)

Compare Chagas disease with HAT. 20 marks

QUESTION FIVE (20 MARKS)

Discuss the various protozoan infections of the Circulatory system of man (20 marks)