



MACHAKOS UNIVERSITY

University Examinations for March 2023

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

**FIRST YEAR SUPPLEMENTARY EXAMINATION FOR
BACHELOR OF SCIENCE IN BIOLOGY/BED (SCIENCE)
BSC AGRIC EDU & EXTENSION**

SZL 100:GENERAL ZOOLOGY

DATE: 10/3/2023

TIME: 2.00 – 4.00 PM

INSTRUCTIONS

1. Answer Question 1 (compulsory) and **any two** questions
2. Use clean well labelled diagrams wherever appropriate.

QUESTION ONE (30 MARKS)

- a) Describes the hypotheses to explain the origins of the atmospheric oxygen in the early earth (3marks)
- b) Describe the significance of taxonomy (3marks)
- c) Explain 3 symptoms of the African sleeping sickness (3marks)
- d) Outline 3 key characteristics of the organisms in Kingdom animalia (3marks)
- e) Classify protists based on their sizes and organisation of life forms (3marks)
- f) Describe 2 life stages of *Entamoeba histolytica* (3marks)
- g) Explain the exoerythrocytic stage of *Plasmodium falciparum* (3marks)
- h) Describe three physical state of the early earth (3marks)
- i) Describe osmoregulation in the body of the freshwater fish (3marks)
- j) Distinguish between microevolution and macroevolution (3marks)

QUESTIONS TWO (20 MARKS)

- a) Outline the key characteristics of the Order Xenarthra (10 marks)
- b) Life on earth could have originated from the inorganic chemicals. Discuss (10 marks)

QUESTIONS THREE (20 MARKS)

Discuss the life cycle of myxomycota (20 marks)

QUESTIONS FOUR (20 MARKS)

- a) Discuss characteristics of lampreys (10 marks)
- b) With examples discuss Ciliophoras (10 marks)

QUESTIONS FIVE (20 MARKS)

Discuss the life cycle of Toxoplasma gondii (20 marks)