



MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

FIRST YEAR FIRST SEMESTER EXAMINATION FOR
BACHELOR OF AGRICULTURAL EDUCATION AND EXTENSION
BACHELOR OF SCIENCE IN BIOLOGY
BACHELOR OF EDUCATION (SCIENCE)

SZL 100:GENERAL ZOOLOGY

DATE: 27/1/2022

TIME: 2.00-4.00 PM

INSTRUCTIONS

Answer Question one and Any two other questions

QUESTION ONE (30 MARKS)

- a) Using a phylogenetic tree illustrate the evolutionary pathway of modern animals. (3 marks)
- b) Describe the evidences that all modern living organisms evolved from a common ancestor. (3 marks)
- c) Give evidences that flagellates could be the ancestors to the early animals. (3 marks)
- d) Outline the chemical synthesis of origin of life. (3 marks)
- e) Describe the Origin of Earth's atmospheric oxygen. (3 marks)
- f) Describe the strategy for the Protozoan Identification and Cultivation. (3 marks)
- g) Outline the key characteristics of the animals in the Order Artiodactyla. (3 marks)
- h) Outline the general characteristics of Platyhelminthes. (3 marks)
- i) Describe the general characteristics of Echinodermata. (3 marks)
- j) Outline the three Key features of the Order Chiroptera. (3 marks)

SECTION B.

QUESTION TWO (20 MARKS)

Discuss

- a) The larval stages of the Trematodes. (6 marks)
- b) The general morphology of the Trematodes. (14 marks)

QUESTION THREE (20 MARKS)

Discuss the concept of conjugation using *Paramecium* as an example.

QUESTION FOUR (20 MARKS)

Discuss Acrasiomycota.

QUESTION FIVE (20 MARKS)

Discuss the life cycle of *Theileria parva*.