



MACHAKOS UNIVERSITY

University Examinations for 2024/2025 Academic Year

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

FIRST YEAR FIRST SEMESTER EXAMINATION FOR DEGREE IN
BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION
BACHELOR OF EDUCATION (SPECIAL NEEDS)
BACHELOR OF EDUCATION (SCIENCE)

SZL100 : GENERAL ZOOLOGY

DATE: 16TH JANUARY, 2025

TIME: 8.00 AM – 10.00 AM

INSTRUCTIONS:

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

QUESTION ONE (30 MARKS)

- Describe the morphology of sponges. (3 marks)
- Outline three unique features of ciliophora. (3 marks)
- Outline three differences between hagfish and lamprey. (3 marks)
- Distinguish between agnathans and gnathostomes. (3 marks)
- Outline the three types of mammals based on prenatal development. (3 marks)
- Distinguish between horns and antlers. (3 marks)
- Classify the sponges on the basis of canal types. (3 marks)
- Outline the primary functions of biological membranes. (3 marks)
- Distinguish between polyp and medusa forms of Cnidarians. (3 marks)
- Explain the significance of classification of organisms. (3 marks)

QUESTION TWO (20 MARKS)

- Describe the circulatory system in molluscs. (10 marks)
- Describe reproduction in annelids. (10 marks)

QUESTION THREE (20 MARKS)

Describe the functions of the specialized glands formed from outer skin of mammals.

QUESTION FOUR (20 MARKS)

- a) Describe the external characteristics of amphibians. (10 marks)
- b) Discuss the evolution of reptiles. (10 marks)

QUESTION FIVE (20 MARKS)

Discuss the origin of life by organic synthesis.