

LAIKIPIA



UNIVERSITY

UNIVERSITY EXAMINATIONS

SECOND SEMESTER 2023/2024 ACADEMIC YEAR

FIRST YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE (GENERAL) AND BACHELOR
OF EDUCATION (SCIENCE)

ZOOL 122: VERTEBRATE ZOOLOGY

STREAM: R

TIME: 2 HRS

DAY: FRIDAY [8.30 – 10.30A.M]

DATE: 12/04/2024

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.



INSTRUCTION: Answer **All** Questions in Section A, and only **TWO** questions in Section B
SECTION A (40 MARKS)

QUESTION ONE

Outline any **five** functional adaptations of aquatic amphibians, using the **Eastern Hellbender** as your reference organismal species **(5 Marks)**

QUESTION TWO

Name the **three** orders representing subclass **Lissamphibia**, and state the main distinguishing feature in each given order **(6 Marks)**

QUESTION THREE

Name **two** turtle sub-orders and briefly explain their main distinguishing characteristics

QUESTION FOUR

List any **FOUR** behavioural adaptations of a crocodile **(4 Marks)**

QUESTION FIVE

With a very clear illustration, label **ONLY** four important characteristic features common in all chordates **(5 Marks)**

QUESTION SIX

Briefly discuss any **FIVE** defence mechanisms employed by snakes in nature, giving examples where appropriate **(5 Marks)**

QUESTION SEVEN

Name the **two** established avian classes and state their unique distinguishing structural characteristics **(4 Marks)**

QUESTION EIGHT

Name organisms from which early mammals evolved from **(1 Mark)**

b. List **three** ways evolution from the above identified organisms/forms is thought to have occurred among early mammals **(3 Marks)**



QUESTION NINE

Name the **three** classes in which mammals are classified based on their reproduction. **(3 Marks)**

Section B (30 Marks)

QUESTION TEN

Discuss **SEVEN** different physiological and behavioural adaptations of Lizards for their survival **(15 Marks)**

QUESTION ELEVEN

Citing specific examples, discuss the seven orders in the avian class. **(15 Marks)**

QUESTION TWELVE

Discuss **15** characteristics that distinctly set mammals apart from other species **(15 Marks)**

