

LAIKIPIA



UNIVERSITY

UNIVERSITY EXAMINATIONS

SECOND SEMESTER 2023/2024 ACADEMIC YEAR

**SECOND YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF EDUCATION (SCIENCE) AND BSC.**

(GENERAL)

ZOOL 221: ARTHROPOD BIOLOGY

STREAM: R

TIME: 2 HRS

DAY: THURSDAY[2.30P.M – 4.30P.M] DATE: 18/04/2024

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.



INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION A AND TWO FROM SECTION B

SECTION A: ANSWER ALL QUESTIONS (40MARKS)

QUESTION ONE

Briefly discuss thermoregulation in insects **(3 Marks)**

QUESTION TWO

Briefly describe the external features of Class Symphyla **(3 Marks)**

QUESTION THREE

Briefly describe excretion in the Arachnids **(5 Marks)**

QUESTION FOUR

Briefly describe the process of ecdysis **(4 Marks)**

QUESTION FIVE

Briefly explain reproduction and the reproductive system of the Pycnogonids **(5 Marks)**

QUESTION SIX

Briefly describe the endocrine system of a crayfish **(5 Marks)**

QUESTION SEVEN

Briefly describe Diplopoda adaptation to desiccation and disturbance **(6 Marks)**

QUESTION EIGHT

Briefly describe the digestive system of an insect **(6 Marks)**

QUESTION NINE

State the unique features of the Class Maxilliopoda **(3 Marks)**



SECTION B: ANSWER ANY TWO QUESTIONS (30 MARKS)

QUESTION TEN

Explain the body layout of a Trilobita **(15 Marks)**

QUESTION ELEVEN

Describe the structure and function of an arthropod exoskeleton **(15 Marks)**

QUESTION TWELVE

- a) Name common insect pheromones and citing examples, explain their functions **(10 Marks)**
- b) Describe the shared characters between Remipedes and Cuscutaceans **(5 Marks)**

