



UNIVERSITY EXAMINATIONS

FIRST SEMESTER 2025/2026 ACADEMIC YEAR

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

ZOO/ZOOL 113: GENERAL ZOOLOGY

STREAM: R

TIME: 2 HRS

DAY: WEDNESDAY [14.30 – 16.30 P.M]

DATE: 04/02/2026

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

List any **FIVE** characteristics of animals **(5 Marks)**

QUESTION TWO

Define the following terms commonly applied in zoology **(6 Marks)**

- a) Exoskeleton
- b) Cellular organization
- c) Radial symmetry
- d) Acoelomates
- e) Metabiosis
- f) Heterotrophic

QUESTION THREE

Differentiate between Agnatha and Osteichthyes group of organisms. **(2 Marks)**

QUESTION FOUR

Differentiate Polymerase Chain Reaction (PCR) and Respirometry techniques **(2 Marks)**

QUESTION FIVE

Differentiate between interspecific and intraspecific competition **(4 Marks)**

QUESTION SIX

Outline the biological significance of tissue fixation in microscopy **(4 Marks)**

QUESTION SEVEN

Explain the ecology and mode of feeding exhibited by sponges and its importance **(4 Marks)**

QUESTION EIGHT

Outline the ecological distinction between planarians and tapeworms **(4 Marks)**

QUESTION NINE

Briefly outline the basic structure of sea urchins and their significance in marine ecosystems

QUESTION TEN

(5 Marks)

Name **FOUR** evolutionary changes that characterize the Animal Kingdom

(4 Marks)

SECTION B (30 Marks). Answer only TWO questions.

QUESTION ELEVEN

Discuss the various ecological interactions common in typical ecosystems

(15 Marks)

QUESTION TWELVE

Naming organismal examples, discuss the basic structures and ecology of;

(1 Mark)

a) Cnidarians

(7 Marks)

b) Platyhelminthes

(7 Marks)

QUESTION THIRTEEN

In a microscopic experiment, describe the process and significance of:

(15 Marks)

a) Dehydration

(7 Marks)

b) Embedding

(8 Marks)