

UNIVERSITY EXAMINATIONS

FIRST SEMESTER 2025/2026 ACADEMIC YEAR

**THIRD YEAR EXAMINATION FOR THE DEGREES OF
BACHELOR OF EDUCATION (SCIENCE) AND BACHELOR
OF SCIENCE (GENERAL)**

ZOOOL 311: ANIMAL PHYSIOLOGY

STREAM: R

TIME: 2 HRS

DAY: WEDNESDAY [8.30 – 10.30 A.M]

DATE: 28/01/2026

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.

INSTRUCTIONS

- (i) Answer ALL Questions in Section A and TWO Questions in Section B
- (ii) Do not write on the question paper

SECTION A: SHORT ANSWER QUESTIONS (40 MARKS)**QUESTION ONE**

Explain **five** main functions of the skeletal system in mammals. (10 Marks)

QUESTION TWO

Outline the functions of the Epiphyseal plate and Periosteum layer in bones. (5 Marks)

QUESTION THREE

Explain the concept of negative feedback mechanism in homeostasis. (5 Marks)

QUESTION FOUR

Write short notes on the human small intestine. (5 Marks)

QUESTION FIVE

Draw a neuron and label its parts. (5 Marks)

QUESTION SIX

Explain how gaseous exchange occurs in mammals. (5 Marks)

QUESTION SEVEN

Outline the effects of follicle stimulating hormone and luteinizing hormone (5 Marks)

QUESTION EIGHT

List the hormones produced by the pituitary glands. (5 Marks)

SECTION B: ESSAY QUESTIONS (TOTAL MARKS: 30 MARKS)

QUESTION NINE (15 MARKS)

Write an essay on the different types of muscles in the human body. (15 Marks)

QUESTION TEN (15 MARKS)

Describe the functions of the different hormones in the male and female reproductive system. (15 Marks)

QUESTION ELEVEN (15 MARKS)

Describe the integumentary system in humans. (15 Marks)