

UNIVERSITY OF SWAZILAND
MAIN EXAMINATION PAPER 2009/2010

TITLE OF PAPER: VERTEBRATE ZOOLOGY

COURSE CODE: B302

TIME ALLOWED: THREE (3) HOURS

- INSTRUCTIONS:**
1. ANSWER ANY FOUR QUESTIONS.
 2. EACH QUESTION CARRIES TWENTY FIVE (25) MARKS.
 3. ILLUSTRATE YOUR ANSWERS WITH LARGE AND CLEARLY LABELED DIAGRAMS WHERE APPROPRIATE.

SPECIAL REQUIREMENTS:

NONE

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN
GRANTED BY THE INVIGILATORS**

ANSWER ANY FOUR (4) OUT OF THE SIX (6) QUESTIONS

QUESTION 1

“Snakes are deaf, have bad eye-sight and are therefore poorly adapted to their environment”. Critically discuss this statement.

[25 marks]

QUESTION 2

In Australia, marsupials have evolved for at least 100 million years in isolation from placental mammals. Discuss the anatomical differences between these two taxa; and then highlight the similarities which have arisen due to convergent evolution.

[25 marks]

QUESTION 3

Describe and contrast the circulatory systems of osteichthyan fishes and mammals.

[25 marks]

QUESTION 4

Describe the diversity and life histories of Swaziland’s amphibians.

[25 marks]

QUESTION 5

Write an essay entitled “The influence of the environment on the form of nitrogenous waste products of vertebrates”.

[25 marks]

QUESTION 6

Are the teeth and jaws of mammals adapted to their diet? Answer this question with the aid of diagrams.

[25 marks]