

4A

UNIVERSITY OF SWAZILAND

MAIN EXAMINATION PAPER 2013/2014

**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**

Describe and compare the circulatory system of the Osteichthyes, Amphibia and Reptilia.

[25 marks]

**QUESTION 2**

Write an essay on the diversity and life histories of Swaziland's frogs (Order: Anura).

[25 marks]

**QUESTION 3**

How do birds fly? Illustrate your answer with diagrams.

[25 marks]

**QUESTION 4**

Discuss and compare the appendicular skeletons of Osteichthyes, Reptilia, Aves and Mammalia.

[25 marks]

**QUESTION 5**

“The teeth of mammals are poorly adapted to their diets”. Discuss this statement.

**[25 marks]**

**QUESTION 6**

“The placenta is a uniquely mammalian feature”. Provide a critical analysis of this statement, ensuring that you include a description of the placenta, its function and the various groups that have developed it.

**[25 marks]**