

UNIVERSITY OF SWAZILAND  
FINAL EXAMINATION PAPER 2005

**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 FOUR (4) OUT OF SIX (6) QUESTIONS****QUESTION 1**

Describe and compare the circulatory systems of chondrichthyan fishes and mammals.

[25 marks]

**QUESTION 2**

a) Describe, with the aid of a sketch, how the fangs of adders become erect. [5 marks]

b) Name the four types of snake venom, and describe their effects on humans. Provide examples of snakes carrying each type of venom. [20 marks]

[25 marks]

**QUESTION 3**

Write an essay on the reptiles of Swaziland and their life histories (the use of their English names is acceptable). [25 marks]

**QUESTION 4**

Compare the anatomy, function and evolution of the brains of cyclostomes, reptiles and birds.

[25 marks]

**QUESTION 5**

Discuss and compare the modes of respiration in elasmobranchs, toads, snakes, and rodents.

[25 marks]

**QUESTION 6**

Describe and compare the appendicular skeletons of Osteichthyes, Reptilia, Aves and Mammalia

[25 marks]