

UNIVERSITY OF SWAZILAND

MAIN EXAMINATION PAPER 2010/2011

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 in detail the brain and sensory organs of reptiles.

[25 marks]

QUESTION 2

a) Discuss the diet and mode of feeding in the lamprey?

[9 marks]

b) Describe the basic biology of the hagfish. How does the hagfish differ from the closely related lamprey?

[16 marks]
[25 marks]

QUESTION 3

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

[25 marks]

QUESTION 4

Describe the mechanism of flight in birds? Illustrate your answer with diagrams.

[25 marks]

QUESTION 5

Discuss the changes that took place in the circulatory system during the colonisation of terrestrial habitats. Ensure that you include aquatic, semi-aquatic and fully terrestrial vertebrates. Provide examples and illustrate your answer with diagrams.

[25 marks]

QUESTION 6

Describe the diversity and life histories of elasmobranchs found off the coast of southern Africa.

[25 marks]