### UNIVERSITY OF SWAZILAND

### **MAIN EXAMINATION PAPER 2015/2016**

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** 

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

# **QUESTION 1**

Describe and compare the appendicular skeletons of Osteichthyes, Reptilia, Aves and Mammalia. [25 marks]

# **QUESTION 2**

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

[25 marks]

# **QUESTION 3**

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

[25 marks]

# **QUESTION 4**

How do birds fly? 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**

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

[25 marks]