

UNIVERSITY OF SWAZILAND

MAIN EXAMINATION PAPER 2007/2008

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

Compare the anatomy, function and evolution of the brains of cyclostomes, reptiles and birds. [25 marks]

QUESTION 2

Discuss and compare the modes of respiration in elasmobranchs, toads, snakes, and rodents. [25 marks]

QUESTION 3

How do birds fly? Illustrate your answer with diagrams. [25 marks]

QUESTION 4

a) What are temporal fossae, and what are their functions? [9 marks]

b) Give a comprehensive account of the parapsid, synapsid, anapsid and diapsid skulls? Give examples of organisms that exhibit these skull types. Use diagrams to illustrate your answer. [16 marks]
[25 marks]

QUESTION 5

“The teeth of mammals are adapted to their diets”. Discuss this statement. [25 marks]

QUESTION 6

a) Describe the evolutionary relationships within the class Chondrichthyes. [9 marks]

b) Describe interesting or unusual features exhibited by the Batoidea. [16 marks]
[25 marks]