

UNIVERSITY OF SWAZILAND

MAIN EXAMINATION PAPER 2007

TITLE OF PAPER : ANIMAL PHYSIOLOGY

COURSE CODE : B401

TIME ALLOWED : THREE HOURS

INSTRUCTIONS :

1. ANSWER ANY FOUR QUESTIONS
2. EACH QUESTION CARRIES TWENTY FIVE (25) MARKS
3. WHEREVER POSSIBLE ILLUSTRATE YOUR ANSWERS WITH LARGE CLEARLY LABELLED DIAGRAMS

SPECIAL REQUIREMENTS:

1. CALCULATORS (CANDIDATES MAY BRING THEIR OWN)
2. GRAPH PAPER (ORDINARY)

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN
GRANTED BY THE INVIGILATORS**

QUESTION 1.

- (a) What are the functions of excretory systems in animals? (5 Marks)
- (b) Discuss fully the function of mammalian kidneys (20 Marks)
[Total Marks = 25]

QUESTION 2.

What is an oxygen dissociation curve? List and discuss the various factors that affect the positioning of the oxygen dissociation curves of the blood of named animals. (25 Marks)

QUESTION 3.

- (a) How is body temperature regulated in endotherms? (15 Marks)
- (b) What is acclimation? (5 Marks)
- (c) Define and describe torpor (5 Marks)
[Total Marks = 25]

QUESTION 4.

- (a) Briefly describe the structure and function of the human male reproductive system (10 Marks)
- (b) What is meant by puberty? Write out a discussion on puberty in humans describing the role played by hormones. (15 Marks)

[Total Marks = 25]

QUESTION 5.

- a) Describe the 3 groups of hormones (based on chemical nature and molecular structure). (10 Marks)
- (b) Write a discussion of the hypothalamic control system. (15 Marks)

[Total Marks = 25]

QUESTION 6.

Describe and discuss the physical processes in which heat is lost by animals.

(25 Marks)