

UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER 2017

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.

Endocrine glands and their secretions play a critical role in human physiology regulating metabolic, reproductive and other important processes. Discuss this statement using any 3 (three) endocrine glands detailing their function and that of their secretions. (25 Marks)

QUESTION 3.

What is an oxygen dissociation curve? Describe and discuss the factors that determine the positioning of oxygen dissociation curves detailing the advantages (and disadvantages) of the position of an animal's oxygen dissociation curve. (25 Marks)

QUESTION 4.

What is meant by "contraception"? Write out a full discussion on the various contraceptives and their effectiveness. (25 Marks)

QUESTIONS 5.

- (a) Differentiate between feeding, digestion and nutrition. (15 Marks)
 - (b) Discuss fully any vitamin (10 Marks)
- [Total Marks = 25]

QUESTION 6.

- (a) Using relevant examples discuss the role of counter-current systems in living organisms. (12 Marks)
 - (b) Discuss fully the relationship between size of an animal and metabolic rate. (13 Marks)
- [Total Marks = 25]