

UNIVERSITY OF ESWATINI

MAIN EXAMINATION PAPER 2018

TITLE OF PAPER : ANIMAL PHYSIOLOGY

COURSE CODE: B401/BIO431

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.

What is a hormone? Write fully on hormones in physiological systems detailing: their chemical composition and structure as well as their areas of control. (25 Marks)

QUESTION 2.

Write fully on the human respiratory system. (25 Marks)

QUESTION 3.

(a) Define, with examples, the following terms (3 marks each):

- a. Endotherm
- b. Ectotherm
- c. Homeotherm
- d. Poikilotherm
- e. Heterotherm

(b) How does conduction contribute to the way animals gains and lose heat

(10 marks)

[Total Marks = 25]

QUESTION 4.

What is meant by “the metabolic rate” of an animal? Discuss fully giving details of each of the contributors to an animal’s metabolic rate. (25 Marks)

QUESTIONS 5.

What structures are used by animals for locomotion? Give a description of the anatomy and discuss the function of each structure

QUESTION 6.

(a) What is meant by contraception? (5 Marks)

(b) List, describe and discuss any four (4) methods of contraception. (20 Marks)

[Total Marks = 25]