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UNIVERSITY OF ESWATINI

SUPPLEMENTARY/RESIT EXAMINATION PAPER 2019

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.

(a) Describe the structure and functioning of the two types of lungs giving examples of the animals in which they are found. (10 Marks)

(b) Compare regulation of respiration in aquatic and terrestrial animals. (15 Marks)

[Total Marks = 25]

QUESTION 2.

(a) What are the functions of excretory systems in organisms? (10 Marks)

(b) Discuss fully the structure and function of the excretory system found in insects (15 Marks)

[Total Marks = 25]

QUESTION 3.

How does the nervous system relate to the endocrine system? Answer with a full discussion giving clear examples. (25 Marks)

QUESTION 4.

Describe and discuss the structure and function of human skeletal muscles. (25 Marks)

QUESTIONS 5.

What is meant by the "metabolic rate" of an animal? Describe and discuss the components of metabolic rate?

(25 Marks)

QUESTION 6.

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)