

UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER 2008

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) How is food intake controlled in man? (12 Marks)
(b) What role is played by water in human nutrition and metabolism? (13 Marks)

[Total Marks = 25]

QUESTION 2.

Describe any 3 (three) endocrine glands detailing their function and that of their secretions. (25 Marks)

QUESTION 3.

- (a) Differentiate between resting potential and action potential. (15 Marks)
(b) Write notes on the following:
(i) Conduction speed (5 Marks)
(ii) Electrical synapses (5 Marks)

[Total Marks = 25]

QUESTION 4.

Discuss fully ANY THREE of the following:

- (i) Riboflavin
(ii) Calcium
(iii) Ascorbic acid
(iv) Magnesium
(v) Vitamin E (25 Marks)

QUESTION 5.

- (a) How is body temperature regulated in ectotherms? (15 Marks)
(b) What is acclimation? (5 Marks)
(c) Define and describe torpor (5 Marks)

[Total Marks = 25]

QUESTION 6.

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

[Total Marks = 25]