



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2010/2011

INSTITUTE OF OPEN LEARNING

EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION

SZL 409: ENVIRONMENTAL PHYSIOLOGY

DATE: SATURDAY, 5TH FEBRUARY 2011

TIME: 2.00 P.M – 4.00 P.M

INSTRUCTIONS:

- Answer ALL questions in Section A and any ONE question in Section B.
- Illustrate your answers with diagrams and give examples where appropriate.

SECTION A

Answer ALL questions (40 marks)

1. Differentiate between the following terms.
 - a) Poikilothermy and Endothermy
 - b) Stenohaliner and Euryhaline animals
2. Outline the osmoregulatory mechanisms in the following animals:
 - a) Fresh water fish
 - b) Sea turtle
3. Explain the counter- current heat exchange mechanism.
4. Outline the factors that lead to migration of animals.
5. Outline any five survival strategies adopted by the vertebrates found in freezing habitats.
6. Describe briefly five respiratory mechanisms characteristic of animals found in oxygen-deficient zones.
7. Describe briefly the structure of the nephron.
8. Explain the importance of blood pigments.

SECTION B (30 MARKS)

Answer any ONE question.

9. Write an essay on hibernation of animals.
10. “ Reptiles are successful inhabitants of the desert.” Discuss this statement.
