

### KENYATTA UNIVERSITY UNIVERSITY EXAMINATIONS 2011/2012

# IBP DECEMBER 2011 SESSION EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

#### **SZL 409: ENVIRONMENTAL PHYSIOLOGY**

DATE: Thursday 3<sup>rd</sup> May 2012 TIME: 11.00a.m – 1.00p.m

#### **INSTRUCTIONS:**

Answer all questions in Section A and any ONE in Section B.

Illustrate your answer and give examples where appropriate.

#### **SECTION A**

**Answer ALL questions (40 marks)** 

- 1. Differentiate between the following terms:
  - (a) Endothermy and Poikiothermy
  - (b) Symport and Antiport.
- 2. Outline any five factors that lead to the migration of animals.
- 3. Describe briefly the osmoregulatory mechanisms adopted by *Tilapia*.
- 4. Outline the factors that influence oxygen saturation.
- 5. Explain ammonotelism.
- 6. Describe the structure and function of the brown adipose tissue.
- 7. Outline the glycolytic pathway.
- 8. State the factors that influence dispause.

## **SECTION B:**

	Answer	any or	ne questi	on (30	marks	).
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9.	Give a detailed account of respiratory mechanisms in an oxygen-depleted habitat.
10.	Write an essay on thermoregulation in desert vertebrates.
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