



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2009/2010

INSTITUTE OF OPEN LEARNING (IOL)

EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION AND

BACHELOR OF SCIENCE

SZL 409: ENVIRONMENTAL PHYSIOLOGY

DATE: Saturday, 24th July, 2010

TIME: 11.00 a.m. – 1.00 p.m.

INSTRUCTIONS:

SECTION A

Answer **ALL** questions.

1. Explain the principle of homeostasis
2. Outline the thermoregulatory mechanisms adopted by the desert camel.
3. State any five functions of blood.
4. Differentiate between the following terms:-
 - a) Poikilothermic ectotherms and Homeothermic endotherms
 - b) Eury haline and Steno haline animals
5. Describe briefly the structure and functions of the Brown adipose tissue.
6. Outline the factors that lead to migration of animals.
7. State any five respiratory mechanisms adopted by diving vertebrates.
8. Explain the concept of positive cooperativity in Haemoglobin – Oxygen binding.

SECTION B

Answer any **ONE** question. (30 marks)

9. Write an essay on hibernation
10. Describe the structure and functions of the mammalian kidney.