



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

SZL 410: NEUROENDOCRINOLOGY

DATE: Friday 30th March, 2012

TIME: 11.00 a.m. – 1.00 p.m.

INSTRUCTIONS

Answer ALL questions from Section A and ONE question from Section B. Within a section all questions carry equal marks. Illustrate your answers with diagrams and give examples whenever appropriate.

SECTION A

Answer ALL questions (40 marks)

1. Explain refractory period as applied to action potentials.
2. Describe briefly the neuroendocrine control of moulting in insects.
3. Explain the physiological effects of damage to the temporal lobe of the brain of mammals.
4. Outline aspects where the nervous and endocrine systems are considered similar.
5. Describe the endocrine control of water and minerals in mammals.
6. Explain the mechanisms by which information transfer to the long term memory may be interrupted.
7. State the functions of prolactin in amphibians.
8. Explain the regulation of skeletal muscle contraction.

SECTION B

Answer any ONE question (30 marks)

9. Describe in detail the functions and projection pathways of the receptors in the internal ears of vertebrates.
10.
 - a) Explain the relationship between the adenohypophysial glycoprotein hormones.
 - b) Describe the biosynthesis and actions of thyroid hormones.

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