



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2011/2012
SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF EDUCATION AND BACHELOR OF SCIENCE
SZL 305: COMPARATIVE ENDOCRINOLOGY

DATE: Tuesday, 27th March, 2012

TIME: 8.00 a.m. – 10.00 a.m.

INSTRUCTIONS:

Answer **ALL** questions in Section A and any **ONE** in Section B. Illustrate your answer and give examples where appropriate.

SECTION A

1. Outline the characteristics of hormones.
2. Differentiate between the nerve cell and the neurosecretory cell
3. Name the hormones secreted by the following endocrine tissues and state their principal actions.
 - a) Corpus luteum
 - b) Corpus allatum
4. Explain the regulation of parathyroid hormones
5. Outline any five functions of glucocorticoids
6. Describe the structure of the endocrine system of a named invertebrate.
7. Explain the synergism between somatotrophin and insulin
8. Outline the biosynthesis of thyroid hormones

SECTION B

9. Discuss the role of gonadotrophins in mammalian reproduction.
10.
 - a) Explain the role of cyclic Adenosine Monophosphate (cAMP) as a second messenger
 - b) Discuss the hormone-induced process of glucose mobilization.