



# KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2008/2009

## FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

### KST 101: AGRICULTURAL ZOOLOGY

DATE: Wednesday, 26<sup>th</sup> November, 2008

TIME: 11.00 a.m. – 1.00 p.m.

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#### **INSTRUCTIONS:**

Answer **ALL** questions in Section A and any **TWO** questions in Section B. Illustrate your answer with labelled diagrams where appropriate.

#### **SECTION A** (40 marks)

1. Describe the various categories of insects body plan (5 marks)
2. Describe briefly divergent and convergent evolution (5 marks)
3. Compare gaseous exchange in insects and mammals (5 marks)
4. Describe osmoregulatory mechanisms in fresh and salty water fish are different (5 marks)
5. Discuss briefly behavioural mechanisms of temperature regulation in animals (5 marks)
6. Describe the differences between oviparity and viviparity in animals (5 marks)
7. Discuss the structure of a typical motor neuron (5 marks)
8. List down the functions of blood (5 marks)

#### **SECTION B** (30 marks)

9. Write an essay on distinguishing characteristic features of the phylum arthropoda and its major subdivisions (15 marks)
10. Discuss the excretory systems in multicellular organisms (15 marks)
11. Discuss the structure and functions of various regions of the digestive system in animals.
12. Discuss the economic importance of animals to the Kenyan economy (15 marks)