KENYATTA UNIVERSITY

SECOND SEMESTER EXAMINATIONS 2008/2009
UNIVERSITY EXAMINATIONS FOR DEGREE OF BACHELOR OF SCIENCE (ENVIRONMENTAL HEALTH)

HEH 212: VECTOR AND RODENT CONTROL

DATE: Monday 14th September 2009 TIME: 8.00am-10.00am

INSTRUCTIONS:

1. Answer All questions in section **ONE**. In section **TWO**, answer question **ONE** and any other **TWO**
2. Exam duration is 2 hours

SECTION ONE

1. Giving examples, briefly define the following:
   a) Pest management [1mark]
   b) Molting [1mark]
   c) Metamorphosis [1mark]
   d) Rodent [1mark]
   e) Vector [1mark]

2. List five signs and symptoms of Jigger manifestation in human beings. [5marks]

3. Indicate under which taxonomic class the following arthropods fall. [4marks]
   a) Housefly
   b) Mites
   c) Mosquito

d) Sandfly

4. Outline six diseases that rodents play part as vehicles of transmission. [6marks]

SECTION TWO

1. a) Briefly describe how climate change has brought challenges in the control of vectors. [5marks]

   b) Using relevant examples, briefly explain the following biological control approaches of vectors and rodents. [15marks]

      i) Classical

      ii) Augmentation

      iii) Natural

2. a) Describe the major characteristics of rodents and how these (characteristics) can be used to control them. [10marks]

   b) State five main features that an ideal rodenticide should have. [5marks]

3. Describe THREE diseases that can be caused/transmitted by each of the following vectors and state ways in which they can be controlled. [15marks]

   a) Cockroach

   b) Tsetse fly

   c) Ticks

4. Malaria is one of the major vector-borne diseases that pose health challenges in Kenya. Discuss how "Integrated Vector Management (IVM) approach can be used to reduce the magnitude of this disease. [15marks]