



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2011/2012
SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE (ENVIRONMENTAL HEALTH)

HEH 212: VECTOR AND RODENT CONTROL

DATE: Tuesday 3rd April 2012

TIME: 11.000a.m -1.00p.m

INSTRUCTIONS

SECTION A: Answer ALL questions (20 marks)

1. Giving examples, briefly define the following
 - a) Vector [2marks]
 - b) Biological vector [2marks]
 - c) Mechanical vectors [2marks]
2. Enumerate the common characteristics in all species under phylum arthropoda. [5marks]
3. Highlight the criteria you would use to investigate rodent infestation. [5marks]
4. Outline three categories of diseases rats are capable of transmitting to humans. [4marks]

SECTION B: Answer ONE and any other TWO (50 marks)

5. “Inter-annual and inter-decadal climate variability have a direct influence on the epidemiology of vector-borne diseases”. Giving sufficient evidence discuss this statement. [20marks]
6. Identify the most common characteristics of rodents and discuss how these can be effectively used to control them. [15marks]
7. Discuss the bionomics of the following arthropods and suggest ways of controlling them.
 - a) Houseflies [5marks]
 - b) Tsetse flies [5marks]
 - c) Black flies [5marks]
8. a) Explain why it is important to carry out a survey before establishing a rodent control method. [5marks]
b) Discuss five (5) ethical characteristics a rodenticide should meet and explain why these characteristics are necessary. [10marks]