



(Knowledge for development)

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2016/2017 ACADEMIC YEAR**

FOURTH YEAR MAIN EXAMINATIONS

**FOR THE DEGREE
OF**

BACHELOR OF SCIENCE IN BIORESOURCE MANAGEMENT

COURSE CODE: SBC 414

COURSE TITLE: WILDLIFE DISEASES AND ECOTOXICOLOGY

DATE: 20th December 2017

TIME: 11:30 - 1:30 p.m.

INSTRUCTIONS TO CANDIDATES

Answer **ALL** Question in SECTION A and any **TWO** from SECTION B

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over. 

Question 1

RIBU observes ZERO tolerance to examination cheating

- a) Define the following terms:
- (i) Wildlife (1 mark)
 - (ii) Zoonosis (1 mark)
 - (iii) Ecotoxicology (1 mark)
 - (iv) Epidemiological triad (1 mark)
 - (v) Disease reservoir (1 mark)
 - (vi) Emerging diseases (1 mark)
- b) With respect to environmental toxicology, briefly explain the following:
- (i) Ecological stressors. (2 marks)
 - (ii) Bioavailability and exposure (2 marks)
 - (iii) Toxicity Testing/end point. (2 marks)
 - (iv) Biotransformation (2 marks)
- c) List any six key pathogens and diseases they cause in selected wildlife
(4 marks)
- d) Briefly describe the branches of ecotoxicology (6 marks)
- e) Distinguish between
- (i) acute clinical cases and carrier reservoirs (3 marks)
 - (ii) Convalescent and Chronic carriers (3 marks)

Question 2

Pathogen transmission is sometimes referred to as “Chain of Infection”. List and briefly describe the six steps in the chain (20 marks)

Question 3

Describe the factors that determine the susceptibility of an animal host to a given pathogen (20 marks)

Question 4

There is a lot of public interest and politics involved with the study and dissemination of toxicological information. Briefly discuss chlorinated hydrocarbons based pesticides and their controversy in their application for pest control in Africa. (20 marks)