



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER SUPPLEMENTARY/SPECIAL EXAMS

**FOR THE DEGREE OF BACHELOR OF SCIENCE BIORESOURCE
MANAGEMENT AND CONSERVATION**

COURSE CODE: SBC 214

COURSE TITLE: ANIMAL SAMPLING TECHNIQUES

DATE: 4/10/2018

TIME: 3:00 -5:00 P.M.

INSTRUCTIONS TO CANDIDATES

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

1. a) Discuss the population dependent and independent factors and how they affect population fluctuations. (5marks)
- b) Explain the concept/principle of natural exclusion. (5marks)
- c) Name **FIVE** techniques that are used in estimating of population size. (5marks)
- d) Why are multivariate statistical techniques used in ecology? (5marks)
- e) Define the meaning of Leslie matrix. (5marks)
- f) What are the criteria for selecting capture and collecting methods? (5marks)
2. What are conditions that are necessary for the technique of “mark- release-recapture” to reasonable estimation of a population size? (20marks)
3. Write an essay on remote sensing and biotelemetry. (20marks)
4. Energy flow in a given ecosystem is very essential to livelihoods. Discuss. (20marks)
5. What are the causes of animal population dynamics? (20marks)