



20

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR**

**FOURTH YEAR FIRST SEMESTER MAIN EXAMINATIONS
FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN BIORESOURCE MANAGEMENT
AND CONSERVATION**

COURSE CODE: SBC 411

COURSE TITLE: ANALYSIS OF WILDLIFE POPULATIONS

DATE: 21st December 2017

TIME: 3:00 -5:00 p.m.

INSTRUCTIONS TO CANDIDATES

Answer Question One **compulsory (30mks)** and any other Two Questions (**20mks**) each.

TIME: 2 Hours

KIBU observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over. ►

QUESTION ONE (30 MKS)

- a) Explain the meaning of the following as used in analysis of wildlife populations
- (i) Mesopredator release.
 - (ii) Trophic cascade.
 - (iii) Population dynamics.
 - (iv) Carrying capacity.
 - (v) Tolerance range. (5 marks)
- b) Using a well labelled diagram, describe the growth models used to address growth patterns in wildlife populations (5 marks)
- c) Explain the statement “Wildlife populations distribute themselves over the landscape in 2 patterns of dispersion”. (5 marks)
- d) Briefly describe the concept of ecological niche as used in wildlife analysis (5 marks)
- e) State **FIVE** factors that affect the population size and growth in the wild (5 marks)
- f) Illustrate the types of age pyramids used in assessing the distribution of wildlife populations (5 marks)

QUESTION TWO

Describe the techniques used in the estimation of density and abundance of wildlife populations (20 marks)

QUESTION THREE

Giving examples, discuss the causes and types of wildlife population fluctuations (20 marks)

QUESTION FOUR

Discuss factors that limit the geographic distribution of wildlife species. (20 marks)

QUESTION FIVE

Discuss **FIVE** human factors that lead to wildlife population decline. (20 marks)