**UNIVERSITY OF NAIROBI** **COLLEGE OF AGRICULTURE AND VETERINARY SCIENCES**

**FACULTY OF VETERINARY MEDICINE**

**DEPARTMENT OF ANIMAL PRODUCTION**

Fourth year Continuous Assessment Test(CAT)for degree of Bachelor of Science(wildlife management and conservation)

**JWL 430:WILDLIFE POPULATION ECOLOGY**

**Date:17th January 2019 TIME; 9.00 A.M. -11.00A.M**

**ANSWER QUESTION ONE AND ANY OTHER THREE QUESTIONS.**

USE ILLUSTRATIONS AMD EXAMPLES WHERE NECESSARY.

**QUESTION 1**

Briefly explain each of the following as they relate to wildlife population ecology.

a)Issues when thinking about protected areas management. (20marks)

b)the theory of island biogeography. (20marks)

c)Three types of models describing the spatial structure of wildlife populations.(20marks)

d)Population turnover time (20marks)

e)Interspecific competition (20marks)

**QUESTION2**

An avian community from a certain habitat contained 200 Ostrich,120sharpe’s long-claw,100 Helmeted guinea fowl,80Klaa’s Cucko and 90 Pied Kingfishers.Calculate the Shannon and weinner index value for this community.(100marks).

**QUESTION3**

Many Kenya wildlife protected areas are becoming isolated posing a serious threat to the long-term viability of many wildlife population in kenya.Discuss in details.(100marks)

**QUESTION4**

Describe any five practical utilities of ecology in studying wildlife populations.(100marks)

**QUESTION5**

List any five properties of a population and discuss how they help in conservation of endangered species.(100marks)