



#### KIBABII UNIVERSITY

## MAIN CAMPUS SPECIAL/SUPPLEMENTARY EXAM

## UNIVERSITY EXAMINATIONS **2017/2018 ACADEMIC YEAR**

# SECOND YEAR SECOND SEMESTER EXAMINATIONS FOR THE DEGREE

OF

BACHELOR OF SCIENCE IN BIORESOURCE MANAGEMENT AND CONSERVATION

COURSE CODE:

**SBC 223** 

COURSE TITLE:

**TECHNIQUES IN BIORESOURCES MANAGEMENT** 

DATE:

11<sup>th</sup> October, 2018

**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

KIBABII observes ZERO tolerance to examination cheating

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

SBC 223: Techniques in Bioresources Management

### **QUESTION ONE (30MKS)**

- a] Highlight any five components that underlie most of the wildlife management decisions [5marks]
- b] Define Lincoln-Petersen Index. State four assumptions of the Lincoln-Petersen Index
- c] Define wildlife corridors. State any four ways through which these corridors can be enhanced [5marks]
- d] Kakamega forest as an ecosystem has as a result of encroachment been reduced to forest fragments. State and briefly explain five effects of habitat fragmentation [5marks]
- e] State any five types of identification that have been used in wildlife identification within national parks in Kenya [5marks]
- f] Distinguish r- selected and k-selected species and give an example in each of the cases

[5marks]

#### **OUESTION TWO**

Discuss the five approaches used to estimate the wildlife population giving two (2) merits and two (2) demerits of the approaches [20marks]

#### **QUESTION THREE**

Describe factors that shape most of the habitats and in each case indicate whether they modify the habitats positively or degrade them [20marks]

#### **QUESTION FOUR**

Describe the approaches the Kenyan government through Kenya Wildlife Service (KWS) has used to ensure that there is effective enhancement of habitats and ecosystems within protected areas [20marks]

#### **QUESTION FIVE**

Discuss giving the merits and demerits of any five types of sampling that can be used in the estimation of wildlife population [20marks]