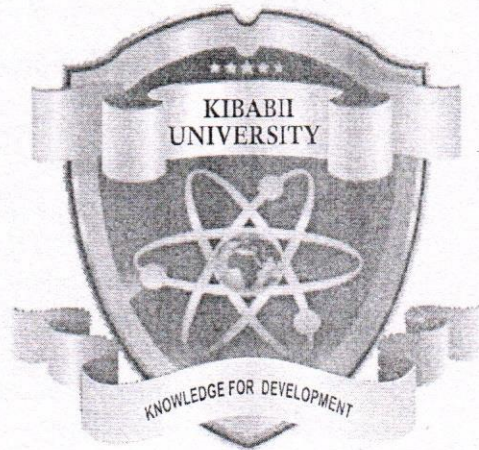


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**KIBABII UNIVERSITY**  
**SPECIAL/SUPPLEMENTARY EXAM**  
**UNIVERSITY EXAMINATIONS**  
**2016/2017 ACADEMIC YEAR**

**SECOND YEAR SECOND SEMESTER EXAMINATIONS**  
**FOR THE DEGREE**  
**OF**  
**BACHELOR OF EDUCATION SCIENCE/ BACHELOR OF SCIENCE IN**  
**BIOLOGY/ BACHELOR OF SCIENCE IN BIORESOURCE MANAGEMENT**  
**AND CONSERVATION/BACHELOR OF SCIENCE IN AGRICULTURAL**  
**BIOTECHNOLOGY**

**COURSE CODE: SZL 123**

**COURSE TITLE: FUNDAMENTALS OF ECOLOGY**

**DATE: 15/9/2017**

**TIME: 11:30 - 1:30 P.M.**

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**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 (30MKS)**

- a) Define the following terminologies as used in ecology (5 marks)
- i) Autoecology
  - ii) Population
  - iii) Carrying capacity
  - iv) Closed ecosystem
  - v) Ecological niche
- b) State and explain **FIVE** types of terrestrial biomes (5 marks)
- c) Outline any **FIVE** branches of ecology (5 marks)
- d) Write short notes on aquatic ecosystem (5 marks)
- e) Briefly highlight how communities and ecosystems are formed (5 marks)
- f) Using relevant examples, briefly describe a hypothetical food chain in terrestrial ecosystem (5 marks)

**QUESTION TWO**

Ecology represents an extension of the hierarchy of life. Discuss. (20 marks)

**QUESTION THREE**

Discuss the important factors that cause a population to grow or decline in size. (20 marks)

**QUESTION FOUR**

Discuss the biotic and abiotic factors influencing distribution and abundance of organisms (20 marks)

**QUESTION FIVE**

Sampling allows us to get an idea of the bigger picture in manageable ways. Discuss the different types of ecological sampling and provide examples of how they are taken (20 marks)