



**JARAMOGI OGINGA ODINGA UNIVERSITY
OF SCIENCE & TECHNOLOGY**

UNIVERSITY EXAMINATIONS 2012/2013

**2ND YEAR 1ST SEMESTER EXAMINATION FOR THE DEGREE
OF BACHELOR OF ARTS IN SPATIAL PLANNING**

(REGULAR)

COURSE CODE: PES 3215

**COURSE TITLE: ELEMENTS AND PRINCIPLES OF BIOLOGICAL
ENVIRONMENT**

DATE: 15/8/2013

TIME: 9.00-11.00 AM

DURATION: 2 HOURS

INSTRUCTIONS

- 1. This paper consists of 5 Questions.**
- 2. Answer Question 1 (Compulsory) and any other 2 questions.**
- 3. Write your answers on the answer booklet provided.**

Question One

- a) Briefly discuss the **four** reservoirs of geochemical cycles? (12 marks)
- b) With relevant examples, explain how man can affect geochemical cycles. (4 marks)
- c) Discuss the aims of environmental taxes. (4 marks)
- d) With relevant examples, discuss population interactions. (10 marks)

Question Two

- a) Discuss the trophic levels in an ecosystem. (10 marks)
- b) Discuss renewable energy. (10 marks)

Question Three

- a) Discuss the concept of carrying capacity in conservation and planning. (10 marks)
- b) Discuss population structure and its use in planning. (10 marks)

Question Four

- a) Discuss the role of ecological integrity in maintaining environmental quality. (10 marks)
- b) Discuss any **five** environmental issues that environmental policies seek to address. (10 marks)

Question Five

Discuss thematic scopes of landscape ecology. (20 marks)