



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF SPATIAL PLANNING AND NATURAL RESOURCE MANAGEMENT
UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE IN
WATER RESOURCES AND ENVIRONMENTAL MANAGEMENT**

1ST YEAR 1ST SEMESTER 2013/2014 ACADEMIC YEAR

REGULAR

COURSE CODE: PES 3111

COURSE TITLE: INTRODUCTION TO ENVIRONMENTAL STUDIES

EXAM VENUE: GIS LAB

STREAM: Water Sciences)

DATE: 24/04/14

EXAM SESSION: 11.30 – 1.30 PM

TIME: 2.00 HOURS

Instructions:

- 1. Answer question 1 (Compulsory) and ANY other 2 questions**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

Q 1. a) With the aid of examples, explain how anthropogenic activities compromise the ability of the natural environment to provide ecosystem services to mankind. [20 marks]

b) Explain what you understand by *Tragedy of the Commons* with at least three distinct examples [10 marks]

Q2. a) Discuss nitrogen cycle and carbon cycles with the aid of sketch diagrams. [20 marks]

Q3 Give a detailed account of urban environmental issues specifying their level of occurrence and human causes. [20 marks]

Q4. Discuss the major activities involved in the disaster management cycle. [20 marks]

Q5 a) Explain the “Greenhouse gas effect” with the aid of a sketch diagram. [10 marks]

b) With the aid of relevant examples, explain the relevance of social sciences to Environmental Studies Course. [10 marks]