



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

**UNIVERSITY EXAMINATIONS 2012/2013**

**1<sup>ST</sup> YEAR 1<sup>ST</sup> SEMESTER EXAMINATIONS FOR THE DEGREE  
OF BACHELOR OF ARTS IN SPATIAL PLANNING AND  
BACHELLOR OF SCIENCE IN ENVIRONMENT AND WATER  
RESOURCES MANAGEMENT**

**COURSE CODE: PES 3111**

**COURSE TITLE: INTRODUCTION TO ENVIRONMENTAL STUDIES**

**DATE: 2/5/2013**

**TIME: 9.00-11AM**

**DURATION: 2HOURS**

**INSTRUCTIONS**

- 1. This paper contains FIVE questions**
- 2. Attempt Question 1(Compulsory) and ANY 2 Questions**
- 3. Write all answers in the booklet provided**

Q 1. a) Give a detailed account of the ecological services that accrue to mankind from the environment [15 Marks]

b) 'Man is both a cause and victim of environmental degradation'. Discuss with the aid of relevant local examples [10 Marks]

c) 'Environmental Studies is a trans-disciplinary course'. Rationalize this statement with the help of examples [5 Marks]

Q2. a) With the aid of examples explain what you understand by Municipal Solid Waste (MSW) and discuss the main techniques for managing municipal solid waste [10 Marks]

b) Discuss the challenges local authorities in Kenya face in their effort to manage Municipal Solid Waste [10 Marks]

Q3. a) Provide a plausible plan of action for mitigating anthropogenic threats to underground and surface water resources in an urban human settlement [10 Marks]

b) Identify and discuss major barriers to effective conservation of forest resources in Kenya [10 Marks]

Q 4. a) 'Energy (production, transportation and utilization) is considered to be the single most important cause of climate change'. Discuss with the aid of relevant local examples [10 Marks]

b) Provide innovative options for mitigating climate change [10 Marks]

Q5. a) With the aid of examples draw a distinction between natural hazards and natural disasters [5 Marks]

b) Provide plausible options for mitigating fire and flood-related disasters in a humanized environment [15 Marks]