



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2013/2014

**THIRD YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN ENVIRONMENTAL
SCIENCE WITH INFORMATION TECHNOLOGY**

(MAIN CAMPUS)

**NES 301: INDIGENOUS KNOWLEDGE SYSTEMS,
TECHNOLOGY AND THE ENVIRONMENT**

Date: 18th November, 2013

Time: 11.00 a.m. - 1.00 p.m.

INSTRUCTIONS:

- **Answer Question ONE and any other TWO questions.**

1. (a) Compare Indigenous Knowledge Systems and 'modern' Science. [6 marks]
(b) Explain the characteristics common to most Indigenous Knowledge Systems of Kenyan ethnic communities. [6 marks]
(c) Examine the ways in which value judgment manifests itself in the adoption of technology for environmental management. [8 marks]
(d) Explain the element of 'critical analysis' employed in Indigenous Knowledge Systems to solve environmental problems. [6 marks]
(e) Outline the policy paths used in Kenya in the control of technologies. [6 marks]
2. (a) Explain with examples from Kenya, FOUR signs on how 'modernity' has influenced Indigenous Knowledge Systems of most communities. [16 marks]
(b) Outline the properties that make Appropriate Technology ideal for developing nations. [4 marks]
3. Discuss how Indigenous Knowledge Systems and modern technology differs in generation and management of wastes. [20 marks]
4. Discuss the main controversies surrounding the adoption of biotechnology in enhancing food security in Kenya. [20 marks]
5. Explain critically the unique characteristics of the relationship between Indigenous Knowledge Systems and the environment which can be adopted in Kenya for sustainable management of forests resources [20 marks]
6. Describe the process of protection of technological innovations in Kenya. [20 marks]