

## MASENO UNIVERSITY UNIVERSITY EXAMINATIONS 2015/2016

# 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: 4th January, 2016

Time: 11.00 - 1.00 pm

#### INSTRUCTIONS:

Answer Question ONE and any other TWO Questions.

#### Question ONE

- (a) Briefly explain the meanings of the following:
  - (i). DNA 'fingerprinting'.

[3 marks]

(ii). Diagnostic analysis of a problem.

[3 marks]

- (b) Examine the 'fallacy of super abundance' of resources within the context of modern technology in African countries. [8 marks]
- (c) Describe the process of protecting new innovations in Kenya. [10 marks]
- (d) Elicit three ways in which value judgment plays out when Technology (T) is applied in management of natural resource base. [6 marks]
- Examine the main controversies surrounding the adoption of biotechnology in enhancing food security in Kenya. [20 marks]
- Discuss the unique characteristics of the relationship between Indigenous Knowledge Systems and environment before and after colonization in Kenya.
   [20 marks]
- Explain how modern technology and Indigenous Knowledge Systems (IKS) differs in management of solid wastes in urban areas. [20 marks]
- Discuss the role of Appropriate Technology in alleviating poverty in African Countries. [20 marks]
- Compare and contrast between 'critical observations' and 'evaluation on viability' used in Indigenous Knowledge Systems (IKS) to solve environmental problems. [20 marks]