



MASEKO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**FIRST YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF EDUCATION WITH INFORMATION
TECHNOLOGY
(HOMA BAY CAMPUS)**

EMA 111: ENVIRONMENTAL EDUCATION

Date: 29th March, 2014

Time: 11.00 - 1.00pm

INSTRUCTIONS:

- Answer QUESTION ONE and any other TWO questions.

Answer question one and two other questions

1. Define the following terms **(4marks)**
- a) Terrestrial ecosystem
 - b) Chemo autotrophs
 - c) Trophic level
 - d) Photoautotrophs
- b) i) What is the focus of environmental education for sustainability? **(4marks)**
- ii) Explain six values and attitudes required for a person who has learned environmental education for sustainability. **(6marks)**
- iii) Explain six teaching methodologies of teaching environmental education for sustainable development. **(6marks)**
- iv) Explain four methodologies that are used to bring environmental education for sustainability to schools **(4 marks)**

- v. Spaceship earth was popularized by American inventor Buckminster fuller (1895-1983). State ten reasons which support the use of the term as related to environmental education. (10 marks)
2. a) Give the definition of ecological crisis and explain 3 of its causes (5marks)
- b. Greenhouse gases are increasing their concentration in the atmosphere. This is elevating the temperature in the lower atmosphere and contributing to global warming. Name the principle greenhouse gases and for each, state how it is formed in the atmosphere its effects and how it can be controlled. (15 marks)
3. a) Explain ten principles in the study of environmental education. (10 marks)
- b) State the concerns of the Tbilisi conference in reference to the teaching of environmental education in educational institutions. (3marks)
- c) Explain the concept abiotic factors and explain the relevance of each to the environment (7marks)
4. The present state of the Kenyan environment calls for urgent environmental conservation and management measures.
- a) How is environmental conservation related to environmental management (4 marks)
- b). Identify and describe any 6 environmental problems facing Kenya highlighting their possible causes. (12 marks)
- c). Identify any four measures that the Government of Kenya is taking to improve the environment. (4 marks)