



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2012/2013

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

EMA 111: ENVIRONMENTAL EDUCATION

Date: 7th September, 2013

Time: 8.00 – 10.00am

INSTRUCTIONS:

- ◆ Question One is Compulsory.
- ◆ Answer Any Other Two questions.

INSTRCTIONS:

Question 1 is **Compulsory**. Answer any **TWO** questions.

- Q. 1 A. Define the term ecosystem and differentiate between the various kinds of ecosystems. (4 marks)
- b) Discuss the various goals of environmental education as adopted by the Tbilisi Declaration in 1978. (3 marks)
- c) Define the term "Trophic cascade", citing how it contributes to an increase or a decrease of biodiversity in the ecosystem. (8 marks)
- d) Discuss various contributory factors to the extent of environmental crisis today. (6 marks)
- e) Discuss three models and instruments that may be useful for addressing staff development needs for environmental education for sustainability. (3 marks)
- f) Discuss various values and attitudes that need to be adopted by a teacher and a learner of environmental education for sustainability. (6 marks)

Answer any TWO questions from this section.

- Q.2 a) Define the term autotrophs, citing the two categories and explain the ways in which they obtain food in the ecosystem. (5 marks)
- b) Discuss the evolution of environmental Education (15 marks)
- Q. 3a) Discuss various anthropogenic means that have contributed to global warming and suggest possible remedies. (10 marks)
- b) Discuss the various domains of competencies of an environmental education for sustainable development teacher. (10 marks)
- Q. 4a) Explain the steps which the government of Kenya has taken to manage its degraded environment. (6 marks)
- b) Discuss the various techniques that can be adopted in the teaching of environmental education for sustainability. (14 marks)