



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**SECOND YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE (ENVIRONMENTAL SCIENCE)
WITH INFORMATION TECHNOLOGY**

(MAIN CAMPUS)

NES 211: AGROFORESTRY SYSTEMS

Date: 3rd April, 2014

Time: 2.45 - 5.00pm

INSTRUCTIONS:

- Answer QUESTION ONE and any other TWO questions.



1. a) Describe how Agroforestry components are arranged in space and time. [8 marks]
 - b) Explain the criteria to be satisfied for a land use to be called an agroforestry system. [8 marks]
 - c) Explain how the Harvest Index (HI) and Land Equivalent Ratio (LER) can be used to evaluate productivity of agroforestry systems. [8 marks]
 - d) Give THREE advantages for using trees and shrubs as for fodder production in dry seasons. [6 marks]
 2. Examine the importance of buffers in environmental conservation. [20 marks]
 3. a). Explain FOUR possibilities of combining systems in agroforestry. [8 marks]
 - b). Discuss THREE agroforestry technologies that maintain or improve soil fertility. [12 marks]
 4. Describe FIVE agroforestry systems that can be used to mitigate the impacts of drought in Northern Kenya. [20 marks]
 5. Explain the Diagnosis and Design methodology used in agroforestry. [20 marks]
 6. Discuss the criteria used for the evaluation of hedgerow intercropping system in agroforestry. [20 marks]
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