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**W1-2-60-1-6**

##  JOMO KENYATTA UNIVERSITY

**OF**

**AGRICULTURE AND TECHNOLOGY**

# University Examinations 2012/2013

**SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS AND RURAL DEVELOPMENT/BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT AND ENTERPRISE DEVELOPMENT**

**AHS 2205 :** **PRINCIPLES OF HORTICULTURE**

**DATE: AUGUST 2012 TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER ALL QUESTIONS. TOTAL MARKS 70**

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**Q1.** (a) Define horticulture and outline the key characteristics of

horticulture. [4 marks]

(b) Outline the horticultural practices carried out by the Romans in the ancient times and explain the importance of each of these practices in horticulture. [6 marks]

**Q2.** (a) Discuss the major challenges that face horticulture.

 [8 marks]

 (b) Is it important to have a horticultural policy as a country?

Explain. [4 marks]

 (c) What is the contribution of horticulture to food security?

 [3 marks]

**Q3.** You are in charge of a large nursery that produces propagation material for local and export markets. How ill you carry out the following?

 (a) Regulate the growth of seedlings to attain desired sizes in

time for the market. [4 marks]

(b) Harden the seedlings before sale. [2 marks]

**Q4.** (a) Which approach would you use in crop nutrition and pest

management during horticultural production? [6 marks]

(b) Do you or not recommend use of plastic mulches in the tropics? Explain. [3 marks]

**Q5.** (a) How can long-day plants be successfully produced in the

tropics? [2 marks]

(b) Outline two examples of use of chemicals on commercial scale to regulate plant growth processes. [4 marks]

**Q6.** (a) What do you understand by the term biennial bearing in

fruit crops and how can it be controlled? [6 marks]

(b) Outline two examples of use of chemicals on commercial scale to regulate plant growth processes. [4 marks]

**Q7.** It is now a common practice for growers to source seedlings for various horticultural crops from nurseries in any part of the country. What risks are associated with movement of such seedlings from one region to another and how can these risks be addressed to safeguard the horticultural industry? [10 marks]