



# MERU UNIVERSITY COLLEGE OF SCIENCE & TECHNOLOGY

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## University Examinations 2012/2013

SECOND YEAR, SECOND SEMESTER, EXAMINATION FOR DEGREE OF BACHELOR OF  
SCIENCE IN HORTICULTURE

### AHS 2203: PRINCIPLES OF HORTICULTURE

DATE: DECEMBER 2012

TIME: 2 HOURS

INSTRUCTIONS: Answer question *ONE* and any other *TWO* questions

#### QUESTION ONE – 30 MARKS

- (a) What are the key characteristics of horticultural crops that distinguish them from field crops? (4Marks)
- (b) Explain the importance of Horticulture in food security and the economy of Kenya. (4Marks)
- (c) Describe the management practices you would carry out in raising transplants for horticultural crops. (6Marks)
- (d) How do the following factors influence horticultural crop production in Kenya?
- (i) Temperature (3Marks)
  - (ii) Soils (3Marks)
- (e) Briefly discuss the importance of the following practices during horticultural crops production.
- (i) Proper postharvest handling (4Marks)
  - (ii) Grading (4Marks)
- (f) What is a phytosanitary certificate? (2Marks)

#### QUESTION TWO – 20 MARKS

Discuss the strategies you would adopt in carrying out the following practices during horticultural crop production.

- (i) Water Management (10Marks)

(ii) Pest Management

(10Marks)

**QUESTION THREE – 20 MARKS**

Farmers in Machakos have reported high mango yields in one year followed by very low yields in the next season.

(i) Identify the possible problems facing these farmers.

(5Marks)

(ii) How can this problem be solved?

(15Marks)

**QUESTION FOUR – 20 MARKS**

Discuss the suitability of greenhouse production in Kenya.

(20Marks)

**QUESTION FIVE – 20 MARKS**

(i) Why is it necessary to regulate movement of plants, seeds and plant parts between countries?

(12Marks)

(ii) Propose ways in which this regulation can also be enforced within the country. (8Marks)