



# MACHAKOS UNIVERSITY

University Examinations 2018/2019

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRIBUSINESS MANAGEMENT

FOURTH YEAR AND SECOND YEAR SECOND SEMESTER EXAMINATION FOR  
BACHELOR OF SCIENCE (AGRIBUSINESS MANAGEMENT)

AGR 206: HORTICULTURAL CROPS

DATE: 8/5/2019

TIME: 2:00 – 4:00 PM

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## INSTRUCTIONS:

Answer Question One and Any Other Two Questions

### QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain the THREE classifications of fruits based on temperature requirements and give an example for each of the classes (3 marks)
- b) Explain FOUR reasons that have promoted Kenya's horticultural sector (4 marks)
- c) Explain 4 pre-harvest factors affecting the quality of vegetables (4 marks)
- d) Explain THREE ways of preventing water loss on cut-flowers after harvesting (3 marks)
- e) Outline THREE advantages of harvesting cut-flowers at bud stage (3 marks)
- f) Describe FOUR instances where grafting is useful in propagation of fruits (4 marks)
- g) Differentiate between landscape horticulture and interior scaping (2 marks)
- h) Explain FIVE strategies used in biological control of horticultural pests. (5 marks)
- i) Describe two mechanical ways of pest control. (2 marks)

### QUESTION TWO (20 MARKS)

Describe the following horticultural production systems

- i) Home gardening
- ii) Market gardening
- iii) Organic gardening
- iv) Commercial horticultural production

### **QUESTION THREE (20 MARKS)**

Discuss FIVE types of marketing horticultural produce

### **QUESTION FOUR (20 MARKS)**

Discuss how the following factors affect production of horticultural crops

- i) Temperature (5 marks)
- ii) Light (5 marks)
- iii) Water (5 marks)
- iv) Market (5 marks)

### **QUESTION FIVE (20 MARKS)**

Discuss the key tenets of each of the following regulations and market standards applicable to horticultural produce from Kenya to the European and USA markets

- i) EU directive on quarantine pests (5 marks)
- ii) USDA sanitation protocol for Geraniums (5 marks)
- iii) GlobalGAP (5 marks)
- iv) British Retail Consortium (BRC) (5 marks)