



# MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRIBUSINESS MANAGEMENT AND TRADE

FOURTH YEAR SPECIAL/ SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT

**HOR 441: VEGETABLE PRODUCTION**

DATE: 22/1/2021

TIME: 2.00-4.00 PM

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## **INSTRUCTIONS:**

**Answer question one and any other two questions**

### **QUESTION ONE**

- a) Explain three differences between exotic and traditional vegetables (3 marks)
- b) Explain FOUR antinutritional factors in vegetables (4 marks)
- c) Explain two classification of vegetables based on temperature adaptation (4 marks)
- d) Describe FOUR ways in which amaranth can be utilised for human consumption (4 marks)
- e) Describe THREE categories of African indigenous vegetables based on cultivation status (3 marks)
- f) Explain two agronomic differences in growing tomatoes in greenhouse compared to open field (4 marks)
- g) Describe four climatic conditions in production of cabbage (4 marks)
- h) Describe four symptoms of down mildew disease in onion (4 marks)

### **QUESTION TWO**

Discuss production of onion under the following headings

- a) Climatic requirements (5 marks)
- b) Crop establishment (5 marks)
- c) Fertilizers and manures (5 marks)
- d) Harvesting and grading (5 marks)

### **QUESTION THREE**

Discuss production of French bean under the following headings

- a) Application of manures and fertilizers (5 marks)
- b) Grading and storage (5 marks)
- c) Two pests and their management in Kenya (10 marks)

### **QUESTION FOUR**

Discuss the following aspects in production of water melon

- a) Earthing up (5 marks)
- b) Fertilizers and manures (5 marks)
- c) Pruning (5 marks)
- d) Mulching (5 marks)

### **QUESTION FIVE**

Discuss greenhouse production of tomato under the following headings

- a) Climate control in the greenhouse (5 marks)
- b) Planting beds preparation (5 marks)
- c) Staking (5 marks)
- d) Irrigation (5 marks)