

MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

THIRD YEAR FIRST SEMESTER EXAMINATION FOR

DIPLOMA IN AGRICULTURAL EDUCATION AND EXTENSION

HOR 0324: FRUIT CROPS PRODUCTION

DATE: 13/8/2021 TIME: 2.00-4.00 PM

INSTRUCTIONS:

Answer ALL questions from Section A and any other TWO from Section B:

SECTION A: COMPULSORY: (30 MARKS)

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Define the term "fruit" from a pomologist point of view (2 marks)
- b) Explain FOUR benefits of fruit farming (4 marks)
- c) Explain TWO factors that are considered when selecting the fruit variety to grow in an orchard (4 marks)
- d) Describe the modified leader system in pruning fruit trees pruning (4 marks)
- e) Explain TWO benefits in the management of smaller sized fruit trees (4 marks)
- f) Describe TWO ways in which pollination in a fruit orchard is boosted (4 marks)
- g) Describe TWO methods of conducting flower treatment in fruit trees production (4 marks)
- h) Explain FOUR benefits of permanent grass culture in weed management (4 marks)

SECTION B: Answer any TWO Questions (40 Marks)

QUESTION TWO (20 MARKS)

- a) Describe the process of propagation of passion fruits using seeds (10 marks)
- b) Describe three symptoms and two control measures for each of the following diseases infecting bananas
 - i. Panama disease (5 marks)
 - ii. Cigar end rot (5 marks)

QUESTION THREE (20 MARKS)

- a) Explain five precautionary measures during harvesting of avocado fruits (10 marks)
- b) Explain FIVE ways of utilization of pineapple fruits (10 marks)

QUESTION FOUR (20 MARKS)

- a) Describe the following practices in strawberry production
 - i. Beds preparation (2 marks)
 - ii. Planting of seedlings (3 marks)
- b) Explain various classification of grapes based on their uses (10 marks)

QUESTION FIVE (20 MARKS)

- a) Describe whip and tongue method in apple propagation (10 marks)
- b) Explain FIVE practices that ensure successful graft union when grafting mangoes(10 marks)