



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

HOR 442: FRUIT PRODUCTION

DATE: 9/12/2019

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 (30 MARKS)

- Explain the FOUR classification of fruits based on the growth pattern (4 marks)
- Explain the TWO factors a fruit farmer must consider when selecting the variety of a fruit tree to plant (4 marks)
- Explain FOUR reasons for pruning fruit tree (4 marks)
- Describe the TWO weed management practices in fruit production (4 marks)
- Describe TWO ways of boosting pollination in a fruit orchard (4 marks)
- Explain THREE conditions under which vegetative propagation would be more suitable for a farmer to use in fruit production (3 marks)
- Explain THREE reasons for fruit thinning (3 marks)
- Describe FOUR marketing types for the fruit produce (4 marks)

SECTION B: Answer any TWO Questions (40 Marks)

QUESTION TWO (20 MARKS)

Discuss the following management practices in production of strawberries

- Preparation of planting bed (5 marks)
- Fertilization (5 marks)
- Pests and diseases (10 marks)

QUESTION THREE (20 MARKS)

Discuss the following types of fruit orchards

- a) High density orchard (5 marks)
- b) Multistoried orchard (5 marks)
- c) Clonal orchard (5 marks)
- d) Orchardling with intercrops (5 marks)

QUESTION FOUR (20 MARKS)

Discuss the following management practices in production of apples

- a) Ecological requirements (5 marks)
- b) Planting (5 marks)
- c) Staking (5 marks)
- d) Pruning (5 marks)

QUESTION FIVE (20 MARKS)

Discuss the following management practices in production of mangoes

- a) Flower treatment (5 marks)
- b) propagation (10 marks)
- c) Pruning (5 marks)