



KISII UNIVERSITY

UNIVERSITY EXAMINATIONS

**THIRD YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN AGRICULTURE
SECOND SEMESTER 2024/2025
[JANUARY – APRIL, 2025]**

HORT 342: FRUIT PRODUCTION

STREAM: Y3 S2

TIME: 2 HOURS

DAY: WEDNESDAY, 12:00 - 2:00 P.M.

DATE: 16/04/2025

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Attempt ALL questions in section A and any TWO in section B.***

SECTION A: (30 MARKS)

Q1. Describe orchard establishment under the following topics:

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|-------------------------------|-----------|
| a). Roads and Drainage layout | (2 marks) |
| b). Hole preparation | (2 marks) |
| c). Wind breaks | (3 marks) |
| d). Fencing | (3 marks) |

Q2. Describe the following:

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|-----------------------------|-----------|
| a). Sod culture | (4 marks) |
| b). Smudging/Forcing | (4 marks) |
| c). Orchard site selection. | (4marks) |

Q3. Some fruits cannot withstand transportation over long distances and should therefore preferably be ripened near the consumption area. Discuss and give examples (8 marks)

SECTION B: (40 MARKS)

- Q4. a). Discuss the successful ecophysiology of pineapples (10 marks)
b). Discuss the mango growth patterns. (10 marks)
- Q5. a). Prepare a brief extension guide write up on orchard layout of Hass Avocado with regard to its flowering pattern. (10 marks)
b). The False Codling Moth (FCM) *Thaumatotibialeucotreta* is a new challenge to avocado growers. Discuss. (10 marks)
- Q6. a). Describe the banana Panama disease symptoms and control measures (10 marks)
b). Special operations in banana production ensure high-quality banana production. Explain. (10 marks)
- Q7. a). Prepare a detailed communication guiding farmers on training and pruning of passion fruits (10 marks)
b). Describe Boron deficiency in pawpaw plants. (10 marks)