

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN  
AGRICULTURE**

**HORT 341: TROPICAL AND SUB TROPICAL FRUITS**

**STREAMS: BSC AGRI Y3S2**

**TIME: 2 HOURS**

**DAY/DATE: MONDAY 05/07/2021**

**5.00 P.M. – 7.00 P.M.**

**INSTRUCTIONS:**

- The paper contains section A and B.
- Answer all questions in section A and any two from section B.
- Marks for each question are indicated in parenthesis ( )
- Total marks = 70

**SECTION A (TOTAL MARKS 30) ANSWER ALL QUESTIONS**

1. (a) Describe the three horticultural races of avocado fruit found in Kenya. (6 marks)  
  
(b) Explain why producers, consumers and traders prefer Hass avocado compared to other cultivars. (4 marks)
2. Explain the following with respect to fruit production.  
  
(a) Quincunx orchard layout (4 marks)  
(b) Formative and structural pruning of mangoes (6 marks)
3. With examples, describe the IQ10 theory as used in fruits storage. (5 marks)
4. Explain how the citrus tree can be maintained in the tropical and sub-tropical climates.

(5 marks)

**SECTION B: (TOTAL MARKS 40) ANSWER ANY TWO QUESTIONS**

5. (a) Low productivity of fruits is a common phenomenon in Kenya. Explain the causes of this low productivity. (10 marks)
- (b) The standard of living of the people of a country is dependent upon the production and per capita consumption of fruits. Explain the economic benefits of fruits. (10 marks)
6. (a) Discuss the probable causes of unfruitfulness in fruit orchards in Kenya. (10 marks)
- (b) With examples, describe the pre-harvest maturity indices that could guide harvesting of various fruits. (10 marks)
7. (a) Explain the common challenges that affect mango production in Kenya. (10 marks)
- (b) Discuss pruning techniques and training systems employed in fruit production. (10 marks)
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