

HORT 341

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE

HORT 341: TROPICAL AND SUB TROPICAL FRUITS

STREAMS: BSC (HORT)

TIME: 2 HOURS

DAY/DATE: THURSDAY 06/04/2020

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

- This 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

- (a) Classify tropical and sub-tropical fruits based on branching habit and growth type [4 marks]
 - (b) Differentiate between carapaces and cukes affecting avocado fruits [4 marks]
- (a) Explain the economic importance of tropical and sub-tropical fruits [3 marks]
 - (b) Explain formative and structural pruning of mangoes [4 marks]
- (a) Describe the three horticultural races of avocado fruit found in Kenya [6 marks]
 - (b) Scanty flowering is the main reason for disappointing yields in fruits in the tropics and sub tropics. Explain the causes of scanty flowering [3 marks]
- (a) Explain how the citrus tree can be maintained in the tropical and sub-tropical climates (any four) [2 marks]
 - (b) Explain the main challenges faced by papaya farmers in Kenya and how they can be overcome by potential papaya growers [4 marks]

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SECTION B: TOTAL MARKS 40 (ANSWER ALL QUESTIONS)

4. (a) Discuss the potential negative impacts of climate change on tropical and sub-tropical fruit production. [10 marks]
- (b) Suggest adaption and mitigation strategies to deal with the impacts identified in (a) above [10 marks]
5. (a) Explain the common challenges that affect mango production in Kenya [10 marks]
- (b) Describe propagation, planting, harvesting and grading of pineapples [10 marks]
6. (a) Discuss the causes of low productivity in tropical and sub-tropical fruits [10 marks]
- (b) Explain the advantages and challenges of using the tissue culture technique for multiplication of banana seedlings [10 marks]
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