



# UNIVERSITY OF EMBU

2019/2020 ACADEMIC YEAR

SECOND SEMESTER EXAMINATIONS

FOURTH YEAR EXAMINATION FOR THE DEGREE OF SCIENCE IN  
HORTICULTURE

ACH 404A: FRUIT PRODUCTION (TROPICAL AND SUBTROPICAL)

**DATE: OCTOBER 16, 2020**

**TIME: 8:30 AM – 10:30 AM**

**INSTRUCTIONS:**

**Answer Question ONE and ANY Other TWO Questions.**

**QUESTION ONE (30 MARKS)**

- a) Write short notes on the following:
- i) Propagation propagules of pineapples. (4 marks)
  - ii) Importance of proper orchard layout. (4 marks)
  - iii) Importance of phosphorus nutrition in fruit crop development. (4 marks)
  - iv) Sun Blotch disease in Avocado (4 marks)
- b) Describe the most important insect pest of mangoes (4 marks)
- c) Diagnose the cause of the problems described below and give a solution to each one.
- i) Citrus fruits planted in Mombasa have poor coloration (4 marks)
  - ii) Bananas planted in the Kenyan highlands are not producing bunches (4 marks)
- d) Describe the propagation of tree tomatoes (2 marks)

**QUESTION TWO (20 MARKS)**

Describe papaya under the following topics:

- a) Propagation and planting (10 marks)
- b) Climatic requirements (10 marks)



ISO 27001:2013 Certified *Knowledge Transforms*



ISO 9001:2015 Certified

**QUESTION THREE (20 MARKS)**

You are a member of a consultancy firm specializing in passion fruit culture. A client approaches you concerning the culture of passion fruits. Advise the client regarding to:

- i) The most important disease of passion (10 marks)
- ii) Establishment of orchard and training (10 marks)

**QUESTION FOUR (20 MARKS)**

Extension department from Turkana County has approached you to deliver a lecture to the potential fruit growers. Prepare well elucidated points on factors considered before investing in a fruit production venture (20 marks)

**QUESTION FIVE (20 MARKS)**

- a) Discuss how tropical and subtropical climates and soils should be managed to allow successful fruit growing (10 marks)
- b) You have been employed by the Kenyan Government to promote fruit production and consumption in Kenya. Describe five strategies which you could use to accomplish this task. (10 marks)

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