

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

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

HORT 443: BEVERAGES, MEDICINAL AND NUT CROPS

STREAMS:

TIME: 2 HOURS

DAY/DATE: TUESDAY 21/09/2021
P.M.

11.30 A.M. – 1.30

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: (30 MARKS)

1. a) describe the process of decaffeination of coffee. (5 marks)
b) Differentiate between *C. arabica* (arabica) and *C. canephora* (robusta) coffee. (4 marks)
2. a) Explain at least four methods that can be used in tea harvesting/plucking. (4 marks)
b) Explain how sweltering is done during tea processing. (3 marks)
3. a) Explain why pyrethrum pesticides are more preferred to use than other chemicals. (5 marks)

- b) Describe training and pruning of young cashew nut trees. (3 marks)
4. a) Differentiate *pollarding* and *Coppicing*. (3 marks)
- b) Explain the use and economic importance of coconut. (3 marks)

SECTION B (40 MARKS)

5. Discuss climate change impacts on beverage crops production with special reference to tea and suggest adaptation and mitigation strategies. (20 marks)
6. a) Describe how top working is done in coffee and macadamia trees, and state the advantages of top working. (10 marks)
- b) Briefly discuss harvesting and post-harvest management of cocoa. (10 marks)
7. a) Discuss in brief in vitro propagation of pyrethrum. (10 marks)
- b) Describe the ecological requirements of Cinchona (*Cinchona pubescens*) (10 marks)
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