

UNIVERSITY OF FORT HARE

AGH 422
SUBTROPICAL FRUITS

SUPPLEMENTARY EXAMINATIONS

JANUARY
2019

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Time: 3 Hours
Subject: AGH 422
Marks: 100

This paper consists of 2 pages including the cover page

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INSTRUCTIONS

1. Answer any five (5) questions.

Question 1 (20 Marks)

- (a) Although both bananas and pineapples need similar temperature ranges, explain the reason(s) why only pineapples are produced in the coastal regions of the Eastern Cape. [8]
- (b) What climatic and soil conditions would convince you that an area is suitable for banana production? [12]

Question 2 (20 Marks)

- (a) In the tropics, what factors keep (i) the maximum temperatures high but not too hot, (ii) the difference between daily minimum and maximum temperatures low, and (iii) the seasonal temperature difference small? [12]
- (b) What is the origin of climate? Describe thermal and geographic equators. [8]

Question 3 (20 Marks)

- (a) Compare and contrast crop production potentials of humid tropics and subtropical climates. [10]
- (b) Justify that mango fruit load in tropical climate is not as high as in subtropical climate. [5]
- (c) Discuss flower-thinning practice in mango production. [5]

Question 4 (20 Marks)

- (a) (i) When is banana fruit ready for harvesting? (ii) How do farmers minimize the number of banana bunches they visit to check maturity? [6]
- (b) Write brief notes on banana ripening (highlight both natural and artificial ripening). [10]
- (c) In what way does high relative humidity help pineapple plants to reduce water stress? [4]

Question 5 (20 Marks)

- (a) Write notes on panama wilting in banana (with main focus on cause, disease transmission, symptoms and control measures). [12]
- (b) Explain (outline) the wet-processing method to clean coffee beans. [8]

Question 6 (20 Marks)

- (a) Explain the importance of covering banana bunches with bottomless plastic bags? [5]
- (b) Compare and contrast improved and unimproved mango cultivars. [5]
- (c) Define topworking and its contribution in mango trees, and make schematic drawings to describe onto old branches and onto new (water) shoot grafting techniques. [10]

Question 7 (20 Marks)

- (a) Highlight the nature of flowering and crop managements carried out to facilitate pollination in avocado plants. [10]
- (b) Briefly discuss the nature of fruit-fly damage and control measures in guava production. [10]