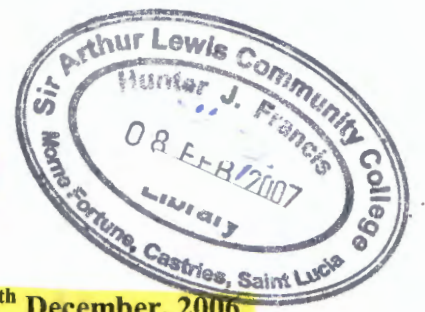


Sir Arthur Lewis Community College
Division of Agriculture

2006/2007 Associate Degree Programme
End of Semester I Examination



Course: Horticultural Crops Agronomy – HCA204
Duration: 2 ½ hours

Date: 15th December, 2006

#A28

ANSWER ANY FIVE (5) QUESTIONS

1. Horticulture is the Science and art of cultivating crops. In what ways are horticulture important to society? **(20 marks)**

2.
 - (a) Environment plays a crucial role in crop growth and development. Explain how environmental factors affect crop growth. **(10 marks)**
 - (b) Define the term fertilizer. List **five (5)** plant nutrients and state **one** function of each **(5 marks)**
 - (c) Discuss **five (5)** factors what would influence your choice of a method of irrigation. **(5 marks)**
 - (d) For the product chosen in (c) above, identify two deficiencies of its marketing system and state two ways in which government can assist. **(6 marks)**

3.
 - (a) Organic farming is experiencing a renewal of its application. Discuss why this may be so and explain **two** possible setbacks to this practice. **(10 marks)**
 - (b) What are the advantages and disadvantages of hydroponics? **(5 marks)**
 - (c) List **five** growing media, apart from soil, that can be used for growing crops. **(5 marks)**

4.
 - (a) Discuss the importance of site slope in the location of a fruit tree orchard. **(5 marks)**
 - (b) Discuss the pruning of fruit trees. **(5 marks)**
 - (c) Discuss the establishment of a named fruit orchard, with regards to:
 - i) method of propagation
 - (ii) soil type and land preparation
 - (iii) spacing
 - (iv) fertilizing and
 - (v) two major pests and discusses and their control **(6 marks)**

5.
 - (a) Discuss three specific marketing strategies for horticultural produce. **(5 marks)**
 - (b) State primarily how horticultural produce is lost at the post harvest stage and suggest ways to reduce such losses **(10 marks)**
 - (c) Discuss three major components of good storage of horticultural produce. **(5 marks)**

6. Use a matrix to compare the production of yam, dasheen and cassava from selection of planting material to yield. **(20 marks)**

7. St. Lucia food import bill is relatively high. Why do you think this is so and make suggestion as to how the food import bill may be reduced? **(20 marks)**