

#### **SUPPLEMENTARY 2012/2013**

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#### UNIVERSITY OF SWAZILAND

#### SUPPLEMENTARY EXAMINATION PAPER

**PROGRAMME:** 

**BACHELOR OF SCIENCE IN AGRONOMY** 

YEAR III AND BACHELOR OF SCIENCE IN

HORTICULTURE YEAR III

**COURSE CODE:** 

**HORT 304** 

TITLE OF PAPER:

TROPICAL AND SUBTROPICAL FRUIT CROPS

TIME ALLOWED:

TWO [2] HOURS

**INSTRUCTIONS:** 

**ANSWER ANY FOUR (4) QUESTIONS** 

DO NOT OPEN UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

# **INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS**

### **QUESTION 1**

- a) Discuss the main and secondary objectives of orchard floor management. (5 marks)
- b) List **two (2)** advantages and **two (2)** disadvantages associated with each orchard floor management tool in completing the table below: (20 marks)

| Advantages and Disadvantages of Orchard floor Management Strategies. |                           |                              |  |
|--|---------------------------|------------------------------|--|
| Tool   | Advantages (any 2 in each | Disadvantages (any 2 in each |  |
|  | category)                 | category)                    |  |
| Cultivation  |                           |                              |  |
| Mulching   |                           |                              |  |
| Mowing   |                           |                              |  |
| Chemical   |                           |                              |  |
| (Herbicides)   |                           |                              |  |
| Biological   |                           |                              |  |
|  |                           |                              |  |

[25 marks]

### **QUESTION 2**

Identify and briefly describe the following types of citrus:

| a) | Tangelo    | (10 marks) |
|----|------------|------------|
| b) | Ugli fruit | (7 marks)  |
| c) | Calamondin | (8 marks)  |

[25 marks]

## **QUESTION 3**

a) Describe the methods commonly employed in the propagation of marula.

(20 marks)

b) What are the selection criteria required in the genetic improvement of marula (5 marks)

[25 marks]

# **QUESTION 4**

Write notes on the production of jaboticabas (*Myrciaria cauliflora* Berg) using the following:

| a) Site requirement   | (4 marks)  |
|-----------------------|------------|
| b) Fertilization      | (6 marks)  |
| c) Propagation method | (15 marks) |

[25 marks]

# **QUESTION 5**

Write notes on production of Cape gooseberry (*Physalis peruviana* L or *P. edulis* Sims) under the following headings:

| a) Soil: type, drainage, water | (10 marks) |
|--------------------------------|------------|
| b) Propagation                 | (13 marks) |
| c) Spacing                     | (2 marks)  |

[25 marks]