

#### **SUPPLEMENTARY 2008/2009**

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## UNIVERSITY OF SWAZILAND

# SUPPLEMENTARY EXAMINATION

PROGRAMME :

**BACHELOR OF SCIENCE IN AGRONOMY** 

YEAR III & BACHELOR OF SCIENCE IN

HORTICULTURE YEAR III

COURSE CODE : HORT 308

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**

Write notes on the following

(a) Planting systems in orchard establishment

(11 marks)

b) Soil management systems in fruit crop production

(14 marks)

[25 marks]

#### **QUESTION 2**

Fruit trees form an important part of any agroforestry system.

(a) Outline benefits of fruit trees in an agroforestry system

(10 marks)

(b) Describe the most reliable propagation technique you may use to grow true-totype guava (*Psidium guajava* Linn) in an agroforestry system (15 marks)

[25 marks]

#### **QUESTION 3**

The pomegranate (*Punica granatum* L.) is an underutilised fruit crop that has tremendous economic potential in Swaziland. The bottleneck is that it is not grown in a large scale in the country

(a) Suggest the method of propagation and describe the procedure you would employ in solving this problem. (15 marks)

(b) Outline the advantages and disadvantages of the method of your choice.

(10 marks)

[25 marks]

#### **QUESTION 4**

Outline the advantages and disadvantages of using the following methods of propagation fruit crops:

(a) Seed (sexual) propagation

(10 marks)

(b) Vegetative (asexual) propagation excluding tissue culture

(15 marks)

[25 marks]

#### **QUESTION 5**

Describe the factors that affect fruit set in fruit crops.

(12 marks)

The erratic flowering behaviour of mango (Mangifera indica L) affects the productivity of the crop. Discuss this statement using appropriate examples.

(13 marks)

[25 marks]