



2ND SEM. 2008/2009

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UNIVERSITY OF SWAZILAND

FINAL 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

- (a) Discuss the germination of a monocot seed such as sweet corn (*Zea mays* L) and that of a dicot seed such as green bean (*Phaseolus vulgaris* L.) (15 marks)
- (b) Discuss the factors influencing seed germination (10 marks)
- [25 marks]**

QUESTION 2

Discuss the factors influencing the flowering of a typical evergreen fruit crop such as mango (*Mangifera indica* L).

[25 marks]

QUESTION 3

Promotion of consumption of underutilized indigenous vegetables such as *Imbuya* (*Amaranthus hybridus* L.) requires knowledge about the propagation and culture of these otherwise wild species. Discuss the cultural practices that have been found to be strongly correlated with shoot and leaf weight of the vegetable.

[25 marks]

QUESTION 4

Local studies have indicated that the yield (clove number and weight /plant) of garlic (*Allium sativum* L) is largely dependent upon plant spacing whereas the dry weight of tops shows a stronger correlation with planting date. Discuss the findings and implications of the study.

[25 marks]

QUESTION 5

Successful production of the tomato (*Lycopersicon esculentum* L) might involve judicious practices of 'trellising' and 'pruning' of the plants at some point during their growth and development. Discuss the value of these practices as well as the advantages and disadvantages associated with them.

[25 marks]