



SUPPLEMENTARY 2010/2011

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

**PROGRAMME: BACHELOR OF SCIENCE IN ABE, AEM AND
AGRIC. EDUCATION YEAR III**

COURSE CODE: HORT 306

TITLE OF PAPER: VEGETABLE AND FRUIT CROP PRODUCTION

TIME ALLOWED: TWO [2] HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

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INVIGILATOR**

QUESTION 1

During your visit to Sidvokodvo you were exposed to the variability of flowering that causes yield unpredictability on Mango (*Mangifera indica* L.).

- a) Outline the components of the flowering process (8 marks)
- b) Discuss flowering plasticity that culminates in alternate bearing typical of the mango crop. (17 marks)

[25 marks]

QUESTION 2

Companion planting is an essential practice in sustainable horticulture practices.

- a) what is a companion plant (2 marks)

Provide at most two (2) appropriate compatible companion plants and incompatible plants for the following horticultural crops to complete the chart: (23 marks)

Crop	Compatible companion	Incompatible companion
Cabbage	2 marks	2 marks
Carrot	2 marks	1 mark
English pea	2 marks	2 marks
Irish potato	2 marks	2 marks
Onion	2 marks	2 marks
Pole bean	2 marks	2 marks

[25 marks]

QUESTION 3

Write short notes on the following vegetable crop management practices:

- a) Thinning of carrots (*Daucus carota* L) (12 marks)
- b) Staking of tomato (*Lycopersicon esculentum* L) (13 marks)

[25 marks]

QUESTION 4

Provide the Family, Genus, Species, and / or Variety names for each of the following vegetable crop species:

- i) Irish potato
- ii) Loquat
- iii) Leek
- iv) Peach
- v) Asparagus
- vi) Macadamia
- vii) Broccoli
- viii) Mango

[25 marks]

QUESTION 5

Write short note on the production of pawpaw (*Carica papaya* L) using these guidelines:

- a) climatic and soil requirements (15 marks)
- b) sexual forms in papaya (10 marks)

[25 marks]