



2ND SEM. 2012/2013

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME: BACHELOR OF SCIENCE IN HORTICULTURE
YEAR 4**

COURSE CODE: HORT 409

**TITLE OF PAPER: POST-HARVEST PHYSIOLOGY OF
HORTICULTURAL CROPS**

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: ANSWER ANY FOUR (4) QUESTIONS

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BY THE CHIEF INVIGILATOR**

INSTRUCTION: ANSWER ANY FOUR (4) QUESTIONS

QUESTION 1

a) Discuss advantages and disadvantages of mechanical harvesting of horticultural crops [10 marks]

b) Discuss with the aid of examples **five (5)** non-destructive maturity indices used to harvest horticultural crops [15 marks]

[25 marks]

QUESTION 2

Discuss any **five (5)** factors affecting postharvest quality of ornamentals

[25 marks]

QUESTION 3

a) Outline the ethylene (C₂H₄) biosynthetic pathway [10 marks]

b) Describe the desirable effects and undesirable effects of C₂H₄ [15 marks]

[25 marks]

QUESTION 4

Discuss **five (5)** biological factors that influence deterioration of harvested horticultural crops

[25 marks]

QUESTION 5

Describe processing and preserving methods for fruit, vegetable and root crops

[25 marks]