



**2<sup>nd</sup> SEM. 2007/2008**

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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**

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

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BY THE CHIEF INVIGILATOR**

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

**QUESTION 1**

Discuss environmental factors that affect deterioration of harvested horticultural crops.

**[25 marks]**

**QUESTION 2**

Describe various maturity indices used to harvest fruits and vegetables. Give appropriate indices for specific crops.

**[25 marks]**

**QUESTION 3**

Describe post-harvest handling systems of ornamental crops.

**[25 marks]**

**QUESTION 4**

Discuss the use of modified and controlled atmosphere (MA and CA) during transport and storage of horticultural crops.

**[25 marks]**

**QUESTION 5**

- a) Outline the ethylene ( $C_2H_4$ ) biosynthetic pathway [13 marks].
- b) Describe undesirable effects of  $C_2H_4$  on harvested horticultural crops [12 marks]

**[25 marks]**