



**2<sup>ND</sup> SEMESTER 2016/2017**

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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:** POSTHARVEST 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) Describe the advantages and disadvantages of hand harvesting of horticultural crops. [10 marks]
  - b) Discuss with the aid of examples five non-destructive maturity indices used to determine time of harvest of horticultural crops. [15 marks]
- [25 marks]

**QUESTION 2**

Discuss five biological factors that influence the deterioration of horticultural commodities.

[25 marks]

**QUESTION 3**

- a) Discuss the use of controlled atmosphere (CA) storage to prolong the shelf life of cabbages. [12 marks]
  - b) Describe supplements to temperature management in post-harvest handling of horticultural produce. [13 marks]
- [25 marks]

**QUESTION 4**

Discuss five methods of pre-cooling harvested horticultural crops

[25 marks]

**QUESTION 5**

Discuss micro-biological concerns of minimally processed fruits and vegetables [25 marks]