



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

THIRD YEAR SECOND SEMESTER UNIVERSITY EXAMINATION

2017/2018 ACADEMIC YEAR

REGULAR

COURSE CODE: AHT 3324

COURSE TITLE: POST HARVEST PHYSIOLOGY AND TECHNOLOGY

EXAM VENUE: **STREAMS: Bsc. Horticulture**

DATE:

TIME: 2 HOURS

EXAM SESSION:

Instructions:

- 1. Answer ALL questions in section A and ANY other 2 Questions in section B.**
- 2. Candidates are advised not to write on question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A [30 MARKS]

Answer ALL questions from this Section.

1. Define post-harvest physiology 2 marks)
2. Name TWO primary events to chemical transformation in post- harvest physiology of fruits and vegetables (2 marks)
3. List any FOUR factors that affect post-harvest losses (4 marks)
4. Name FOUR factors in the quality components of edible fruits (4 marks)
5. Differentiate between physiological and horticultural maturity. (4 marks)
6. Name TWO minor chemical components of fruits and vegetables that are affected by post- harvest handling. (2 marks)
7. a) Define senescence (2 marks)
b) Name FOUR indices of senescence in fruits and vegetables (4 marks)
8. Describe FOUR steps under packing house operations (8 marks)

SECTION B [40 MARKS]

Answer ANY TWO questions from this Section.

9. a) Describe FIVE post-harvest treatment methods as tools in extending storage and marketable life of horticultural perishables (10marks)
b) State TEN most important general requirements and functions of food Packaging materials (10marks)
10. a) Describe FIVE methods of cooling in fruits and vegetable production. (10marks)
b) Outline FIVE methods of storage that does not require refrigeration of fruits and vegetables. (10 marks)
11. Discuss TEN post-harvest management practices. (20marks)