



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya.

Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411

Fax: 064-30321

Website: www.must.ac.ke Email: info@must.ac.ke

University Examinations 2015/2016

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR IN HORTICULTURE

AHS 2411: POST HARVEST TECHNOLOGY (PERISHABLE)

DATE: NOVEMBER 2015

TIME: 2 HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (30 MARKS)

- a) Draw a well labelled diagram showing growth and respiration patterns during development of foetus (10 Marks)
- b) Differentiate between
- i) physiological maturity and Horticultural maturity (4 Marks)
 - ii) Suberization and curing (2 Marks)
- c) Define the following terms
- i) Post-harvest technology (3 Marks)
 - ii) Post harvest loss (2Marks)
- d) Horticultural products undergoes major constant due to secondary causes of loss
- i) What is the secondary causes of loss (2 Marks)
 - ii) Outline any three causes of secondary loss (3 Marks)

- e) Briefly explain the various methods farmers can apply to minimize water loss in fruits and vegetables (4 Marks)

QUESTION TWO (20 MARKS)

- a) Chemicals are mainly recommended for prolonging the shelf life of various farm produce. Briefly outline the various categories of chemicals which farmers and industries can use for this purpose stating how they work. (20 Marks)

QUESTION THREE (20 MARKS)

- a) Outline the various on farm and after harvest causes of farm produce loss (15 Marks)
- b) Use of controlled atmosphere helps to reduce loss of farm produce during storage. Explain (5 Marks)

QUESTION FOUR (20 MARKS)

- a) Explain the various physical indices of maturity that farmers can use to determine the horticultural maturity at the farm level. (12 Marks)
- b) Briefly outline the recent trends developed for handling perishable farm produce (8 Marks)