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University Examinations 2015/2016

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

AAH 3200: PRINCIPLES OF HORTICULTURE

DATE: NOVEMBER 2015

TIME: 2 HOURS

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

QUESTION ONE (30 MARKS)

- a) Define horticulture? (1 Marks)
- b) State the difference between a bonsai and a terrarium? (2 Marks)
- c) Discuss why horticulture is a science as well as an art (5 Marks)
- d) State the importance of horticulture in daily living pattern (5 Marks)
- e) Describe the fields of horticulture in detail (10 Marks)
- f) Discuss the horticultural description of plants (10 Marks)
- g) What are the major functions of plant growth and development (2 Marks)
- h) Describe the non-mineral elements for growth (5 Marks)

QUESTION TWO (20 MARKS)

- a) Distinguish (3 Marks)
 - i) Rest period and dormant period of biennial and perennial plants
 - ii) Photosynthesis and respiration

iii) Budding and grafting

b) Explain the classification of horticultural crops based on response to day length.

(6 Marks)

c) Give two examples each of cool season and warm season types of fruits, vegetables and ornamentals.

(3 Marks)

d) Explain the limiting factors of growth and wellbeing of horticultural plants?

(8 Marks)

QUESTION THREE (20 MARKS)

a) Compare between photosynthesis and respiration processes in plant growth and development.

(5 Marks)

b) Describe the main training systems used in horticultural production.

(3 Marks)

c) State (i) Objectives of pruning

(2 Marks)

(ii) Describe the pruning techniques used in horticulture

(5 Marks)

(iii) Discuss the physiological effects of pruning and training on plants

(5 Marks)

QUESTION FOUR (20 MARKS)

a) What is a rotation effect?

(3 Marks)

b) State the three aspects of plant propagation?

(3 Marks)

c) Giving examples, name various classifications of horticultural crops.

(5 Marks)

d) How does horticulture contribute to the economy of Kenya?

(3 Marks)

e) State the roles played by the horticultural companies in the development of horticulture in Kenya.

(6 Marks)