

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE 2017/2011 ACADEMIC YEAR

REGULAR

COURSE CODE: AHT 3322

COURSE TITLE: SUSTAINABLE HORTICULTURAL PRODUCTION

EXAM VENUE: STREAM: BSC. Horticulture

DATE: EXAM SESSION:

TIME: 2 HOURS

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 in this section

1a. Explain the concept "sustainable horticultural production".

[4 marks]

b. Explain environmental factors which affect fresh produce after harvest.

[6 marks]

c. Highlight key components of integrated crop management.

[10 marks]

d. A nursery practitioner wants to raise vegetable seedlings in advance which will be sold to local producers, explain the practitioner's consideration in terms of environment and wildlife safety.
[6 marks]

e. Explain the importance of planting calendar in a horticultural farm.

[4 marks]

SECTION B

[40 MARKS]

Answer ANY TWO questions in this section

2. Discuss strategies for developing a more sustainable horticulture production.

[20 marks]

- 3. Explain the following in sustainable horticultural production:
 - a. Input efficient management
 - b. Social accountability
 - c. Species diversity
 - d. Local market requirements

[20 marks]

4a. Horticulture must be productive and sustainable that meets the needs of society and the consumer without hindering the ability of future generations. As a consultant horticulturalist, a prospective grower approaches you to conduct a feasibility study for a horticultural project. Describe the components of the study bearing in mind of the above.

[20 marks]