



**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
2019/2020 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 from this section

- 1a. Explain the concept of integrated sustainable horticultural production: [4 marks]
- b. Highlight the characteristics of organic farming in horticulture. [8 marks]
- c. Outline strategies for developing sustainable horticultural production. [6marks]
- d. A nursery practitioner wants to raise vegetable seedlings in advance which will be sold to local producers, explain the site and substrate the practitioner would select. [6 marks]
- e. Explain what is meant by integrated crop management. [6 marks]

SECTION B [40 MARKS]

Answer any TWO QUESTIONS in this Section.

2. Describe an integrated organic crop system including horticultural crops in a hypothetical farm. [20 marks]
3. Explain in sustainable horticultural production:
- a. Efficient water and nutrient use [10 marks]
- b. Social responsibility and Worker welfare [10 marks]
- 4a. As a consultant horticulturalist, a prospective horticultural grower approaches you to advice on what to grow, how to grow and when to grow. Explain the concepts to include in a feasibility study. [10 marks]
- b. Explain the management practices in a nursery establishment for horticulture crops. [10 marks]