



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

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

**FOURTH YEAR FIRST SEMESTER EXAMINATION FOR THE
DEGREE OF
BACHELOR OF SCIENCE IN AGRICULTURAL EXTENSION
EDUCATION AND DEGREE OF BACHELOR OF SCIENCE IN
AGRIBUSINESS MANAGEMENT
2023/ 2024 ACADEMIC YEAR**

SIAYA

COURSE CODE: APB 9405

COURSE TITLE: HORTICULTURAL CROP PRODUCTION

**EXAM VENUE: STREAM BSC. (AGED, AGRBUS.
MGT)**

DATE: EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in section A and B and ANY 2 Questions in section C**
- 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

[20 MARKS]

Answer ALL questions in this section

1a i. Highlight the comparative advantage of Kenya's' horticultural industry. **[4 Marks]**

ii. Illustrate the identity of horticulture from other plant disciplines. **[3 Marks]**

b. Give TWO Examples of the following:

i. Tropical fruits

ii. Fruit vegetables

iii. Temperate berries

iv. Cut flowers

[4 Marks]

c. Explain "Pre – Cooling" as a management procedure in horticultural produce

[5 Marks]

d. Outline the factors that determine the maturity of a horticultural crop at harvest.

[4 Marks]

SECTION B

[30 MARKS]

Answer ALL questions in this section

2a. Explain the concept of "Organic Farming" in the horticultural practitioner's view.

[5 marks]

b. Discuss integrated pest management (IPM) in horticulture.

[5 marks]

3. Explain the effects of climatic factors of temperature and light on horticultural production. **] 8 MARKS]**

4. Enumerate the advantages of protected horticultural production. **[6 MARKS]**

5. Outline the beneficial effects of **Fertigation** in horticultural crop production.

[6 MARKS]

SECTION C

[20 MARKS]

Answer ANY TWO questions in this section

6. Discuss the economic contribution of horticulture in Kenyan economy. **[10 marks]**

7. For a named horticultural crop, describe the following:

a. Varieties grown

b. Training and pruning practices or cultural practices

c. Harvesting and post-harvest handling. **[10 Marks]**

8. Discuss the concept of Good Agricultural Practices (GAP) as a strategy in climate change mitigation and adaptation with relevance to horticultural crop production. **[10 Marks]**