



**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
2022/ 2023 ACADEMIC YEAR**

REGULAR

COURSE CODE: APB 9405

COURSE TITLE: HORTICULTURAL CROP PRODUCTION

EXAM VENUE:

STREAM: BSC. (AGED)

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. Explain the principle of organic production in horticulture. **[4 Marks]**
- ii. How does horticulture differ from other plant sciences? **[3 Marks]**
- b. Give TWO Examples of the following:
- i. Pulse vegetables
- ii. Cole crops
- iii. Temperate berries
- iv. Tropical nuts. **[4 marks]**
- c. Explain the role of Kenya Plant Health Inspectorate Services (KEPHIS) in fresh horticultural produce exports from Kenya. **[5 marks]**
- d. State FOUR harvest indices for horticulture crops. **[4 marks]**

SECTION B [30 MARKS] Answer ALL questions in this section

- 2a. Explain the horticultural practitioner's consideration in terms of environment and wildlife safety. **[5 marks]**
- b. Highlight the components of integrated pest management. **[5 marks]**
3. Briefly explain the effects of temperature and light on horticultural production. **[8 marks]**
4. Explain the factors encouraging horticultural production in Kenya. **[6 marks]**
5. Outline nutrient management techniques in horticultural production. **[6 marks]**

SECTION C [20 MARKS] Answer ANY TWO questions in this section

6. Discuss the role of horticulture in Kenyan economy, illustrating how it is related to other service industries. **[10 marks]**
7. Describe the cultural practices, harvesting and post – harvest handling of a named horticultural crop. **[10 Marks]**

8. Explain the following in horticultural industry:

i. Good Agricultural Practices (GAP) and its components.

[5 Marks]

ii. "Pre – Cooling" in the management of horticultural produce

[5Marks]