

## 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 2016/2017 ACADEMIC YEAR

### **REGULAR**

**COURSE CODE: AHT 3322** 

COURSE TITLE: SUSTAINABLE HORTICULTURAL MANAGEMENT

**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]

1a. Explain the following in relation to sustainable horticultural production:

<ul><li>a) Integrated crop management (ICM).</li><li>b) Integrated crop management (IPM)</li></ul>	[3 marks] [3 marks]
b. Explain Good Agricultural Practices (GAP) sustainable horticultural produ	ction. [6 marks]
c. Highlight the requirements of export market for horticulture produce.	[5 marks]

- 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. [5 marks]
- e. State the sources of pollution in a horticultural farm. [3 marks]
- f. Explain what is meant by traceability. [5 marks]

SECTION B [40 MARKS]

2. Discuss the positive and negative effects of horticultural production on the environment.

[20 marks]

- 3. Explain in sustainable horticultural production:
  - a. Water efficient irrigation
  - b. Social responsibility
  - c. Species diversity
  - d. Worker welfare [20 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. What advice would you give?

[10 marks]

b. Explain the management practices in a nursery establishment. [10 marks]