

## 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

### **RESIT**

**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]

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]

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]