



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

**SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**

**FOURTH YEAR SECOND SEMESTER EXAMINATION FOR THE  
DEGREE OF  
BACHELOR OF SCIENCE IN HORTICULTURE  
2019/2020 ACADEMIC YEAR**

**SPECIAL / RESIT**

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**COURSE CODE: AHT 3421**

**COURSE TITLE: Greenhouse Production and Management**

**EXAM VENUE:**

**STREAM: BSC. HORT.**

**DATE:**

**EXAM SESSION:**

**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer ALL questions in section A and ANY OTHER TWO 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 in this section**

- 1a. Greenhouses are commonly used in Kenya to produce vegetables and nursery stock plants; explain their advantages and challenges. **[10 marks]**
- b. Explain the concept of greenhouse ventilation. **[10 marks]**
- c. Outline a greenhouse business plan in terms of crops to be grown, services offered, structures to used and financing.[8 **marks]**
- d. Explainwhy it is important to maintain optimum relative humidity in the greenhouse.  
**[2 marks]**

## **SECTION B[40 MARKS]**

**Answer ANY TWO questions in this section**

- 2.Explain the following in greenhouse production and management:
  - a. Light and temperature effects on crop growth **[10 marks]**
  - b. Integrated Pest Management **[10 marks]**
- 3.Horticultural growers contemplate growing fresh produce crops under greenhouse for export and domestic markets. Describe ecological and structural design factors considered.  
**[20 marks]**
4. Describe the following practices in greenhouse management:
  - a. Environmental control systems **[10 marks]**
  - b. Soil medium PH and water management **[10 marks]**