



**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

COURSE CODE: AHT 3421

COURSE TITLE: GREENHOUSE PRODUCTION AND MANAGEMENT

EXAM VENUE:

STREAM: BSC. HORT.

DATE:

EXAM SESSION:

TIME: 2 HOURS

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]**