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 AND BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT
2018/2019 ACADEMIC YEAR

REGULAR

COURSE CODE: APT 3413

COURSE TITLE: HORTICULTURAL CROP PRODUCTION

EXAM VENUE: **STREAM: BSC. Aged. &Agri. Mgt.**

DATE: 3RD DEC 2018 **EXAM SESSION: 12.00 – 2.00PM**

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 [30MARKS]

Answer ALL questions from this Section.

1a. Highlight the main features of horticulture farming in Kenya**.** **[10 marks]**

b. A fruit producer wants to establish an orchard in a sparsely populated low potential land which will be sold locally and for export market, explain the prospective producer's consideration in terms of corporate investment policy. **[10 marks]**

c. Explain key components of integrated horticultural production. **[10 marks]**

SECTION B : [40 MARKS]

Answer ANY TWO questions in this section

2. Discuss strategies for developing a more sustainable horticulture production. **[20 marks]**

3. Explain the following in horticultural crop production:

a. Temperature effects **[8 marks]**

b. Effects of light quality and photoperiodism **[6 marks]**

c. Pre – cooling of horticulture produce **[6 marks]**

4a. Greenhouses are commonly used in Kenya to produce vegetables, nursery stock / pot plants. But sometimes outside ambient temperature rises causing inside greenhouse temperature not ideal for production of good quality crop. Explain how the temperature inside the greenhouse can be modulated. **[12 marks]**

b. Explain the objectives and advantages of protected cultivation of horticulture crops.

[8 marks]