



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

**SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**

**THIRD YEAR FIRST SEMESTER UNIVERSITY EXAMINATION FOR THE DEGREE OF  
BACHELOR OF SCIENCE IN HORTICULTURE**

**2017/2017 ACADEMIC YEAR**

**REGULAR**

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**COURSE CODE: AHT 3415**

**COURSE TITLE: NUTS, BEVERAGES AND MEDICINAL PLANTS**

**YEAR :4 SEMESTER :1**

**EXAM VENUE:**

**STREAM: BSc. HORTICULTURE**

**Date**

**Exam session**

**TIME: 2 HOURS**

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### **INSTRUCTIONS**

1. Answer ALL questions in section A and any other TWO Questions in section B
2. Candidates are advised not to write on the question paper
3. Candidates must hand in their answer booklets to the invigilator while in the examination room

**SECTION A 30 MARKS answer all question**

1. (a) List three precautions that should be taken in pyrethrum picking to prevent loss of quality .(3mrks  
(b) State three factors affecting pyrethrin content. (3mrks)
2. (a) Name two major producers of *Cocos nucifera* . (2mrks)  
(b) List two methods of harvesting coconuts giving one advantage of each method. (2mrks)  
(c) State two economic importance's of coconuts. (2mrks)
3. (a) List three vegetative propagation methods applied in cashew nuts. (3mrks)  
(b) Describe cashew nuts production under each of the following topics:
- |            |          |
|------------|----------|
| Harvesting | (1 mrk)  |
| Processing | (2 mrks) |
- 4 (a) State two economic importance cinchona (*Cinchona* spp). (2mrks)  
(b) Describe harvesting and processing of cinchona. (4marks)
5. Briefly discuss macadamia nuts production under each of the following topics:
- (a) Botanical description. (2mrks)  
(b) Propagation. (4 marks)

**SECTION B: (40 MARKS) ANSWER ANY QUESTION FROM THIS SESSION**

- 6 Discuss coffee production in Kenya under the following topics
- (a) Ecological requirements (4 marks)  
(b) Agronomic practices (6 marks)  
(c) Genetic improvement (3marks)  
(d) Protection (3 marks)  
(e) Storage and processing (4marks)
7. Describe the ecological requirements, economic importance, agronomic practices, harvesting, storage and processing of tea in Kenya (20 marks)
8. Discuss sugarcane production in Kenya (20 marks)
9. Discuss sisal production in Kenya (20 marks)