

**W1-2-60-1-6**

## JOMO KENYATTA UNIVERSITY

**OF**

**AGRICULTURE AND TECHNOLOGY**

# University Examinations 2014/2015

**YEAR I SEMESTER II EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS AND RURAL DEVELOPMENT, AGRIBUSINESS MANAGEMENT AND ENTERPRISE DEVELOPMENT, AGRIBUSINESS AND FOOD INDUSTRY MANAGEMENT, FOOD SERVICE AND HOSPITALITY MANAGEMENT, FOOD SCIENCE AND TECHNOLOGY AND FOOD SCIENCE AND NUTRITION**

**AHS 2130: CROP PRODUCTION**

**DATE: APRIL 2015 TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER ALL QUESTIONS**

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**QUESTION ONE (30 MARKS)**

(a) Define the following terms:

i) Cultivar (1 mark)

ii) Cross feet in tea (1 mark)

iii) Dioecious plant (1 mark)

(b) Differentiate between:

i) Rainfall intensity and rainfall effectiveness (2 marks)

ii) Selective picking and strip picking in pyrethrum (2 marks)

(c) Explain four ways by which crops spread from their centres of

origin to other parts of the world. (4 marks)

(d) List three agronomics practices for maintaining soil fertility under continuous cropping. (3 marks)

(e) List six advantages of intercropping. (3 marks)

(f) List four effects of organic matter in the soil. (4 marks)

(g) Explain five factors that influence plant population in a given

area. (5 marks)

(h) State four reasons why in perennial crops seeds are first sown in the seedbed and then transferred to the main field as opposed to direct planting. (4 marks)

**QUESTION TWO (20 MARKS)**

(a) i) What is biennial bearing? (1 mark)

ii) Discuss five causes and possible remedies of biennial

bearing in coffee. (9 marks)

(b) Discuss five factors that influence phyrethrin content in pyrethrum.

(10 marks)

**QUESTION THREE (20 MARKS)**

(a) Discuss seven factors that affect cane quality in sugarcane

production. (15 marks)

(b) What are the disadvantages of using suckers over bulbils in

propagation of sisal. (5 marks)