

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN
AGRONOMY**

AGRI 861: PERENNIAL CROPS

STREAMS: Y2S1

TIME: 3 HOURS

DAY/DATE: WEDNESDAY 4/12/2019

11.30 A.M – 2.30 P.M

INSTRUCTIONS

Answer all questions in section I and any two in section II

SECTION 1 (20 MARKS) ANSWER ALL QUESTIONS

1. (a) Explain the levels at which the productivity of perennial plants production systems can be improved. [3 marks]
- (b) Briefly explain why pruning is essential in coffee production. [3 marks]
- (c) The rate of perennial plant growth and development is dependent upon the surrounding temperature. Explain. [4 marks]
2. (a) Explain why pyrethrum farmers should dry the flowers using the solar dryers. [4 marks]
- (b) What would you consider to be the need of establishing perennial crops in isolated rural areas. [6 marks]

SECTION II (40 MARKS) ANSWER TWO QUESTIONS

3. (a) Discuss the reasons why there has been low production of perennial crops in Kenya. [12 marks]
- (b) Briefly explain multiple stem pruning as used in coffee management. [4 marks]

(c) Explain why you would advise pyrethrum farmers to establish the crop using clonal material. [4 marks]

4. (a) Discuss why it is important for the government to promote perennial crop production.

[12

marks]

(b) Discuss the basic stages of orthodox tea processing after plucking. [8 marks]

5. (a) Sukari out growers are intending to venture in large scale sugarcane production.

Explain to the company the possible challenges that may limit their success. [10 marks]

(b) Discuss the significance of macadamia farming in Kenya. [10 marks]
