

**UNIVERSITY EXAMINATION 2012/2013****SCHOOL OF PURE & APPLIED SCIENCE****DEPARTMENT OF NATURAL SCIENCES****UNIT CODE: DTA 121****UNIT TITLE: AGRICULTURE II****MAIN EXAM****TIME: 2 HRS****INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION A AND ONLY TWO IN SECTION B****SECTION A (30 MARKS)****QUESTION 1**

- a) State any four families of crops mainly grown in Kenya. (4 Marks)
- b) (i) Mention any four advantages of intercropping. (4 Marks)
(ii) State any four uses of water in plants. (4 Marks)
(iii) Mention any three harmful effects of high temperature on crops. (3 Marks)
- c) (i) State any four reasons for primary fillage (4 Marks)
(ii) Outline four advantages for using seeds as planting materials. (4 Marks)
- d) Give four reasons for pruning in crop production. (4 Marks)
- e) Outline three management practices that enhance productivity in forage crops. (3 Marks)

SECTION B (40 MARKS)**QUESTION TWO**

Describe crop rotation under the following subheadings.

- (i) Importance of crop rotation. (10Marks)
- (ii) Factors determining the crop rotation programme. (10Marks)

QUESTION THREE

- (a) State the factors that determine water requirements in plants. (4 Marks)
- (b) Analyze mechanisms employed by plants to overcome water shortage. (8 Marks)
- (c) Outline the agronomic practices that conserve soil moisture. (8 Marks)

QUESTION FOUR

- (a) Describe plants parts used in vegetative propagation giving relevant examples. (16Marks)
- (b) Calculate the number of coconut plants established in one hectare of land, if a spacing of 5M x 4m was adopted. (4 Marks)

QUESTION FIVE

- (a) State and explain any seven management practices carried out on seedlings in nursery beds. (14 Marks)
- (b) Mention any six cultural methods used in controlling crop pests. (6 Marks)