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University Examinations 2012/2013

FIRST YEAR, FIRST SEMESTER EXAMINATION FOR CERTIFICATE/DIPLOMA IN
AGRICULTURE

AGR 0120: PRINCIPLES OF CROP PRODUCTION

DATE: AUGUST 2013

TIME: 1 ½ HOURS

INSTRUCTIONS: Answer question *ONE* and any other *TWO* questions

QUESTION ONE (30 MARKS)

- a) Define the following terms
 - i. Ecology
 - ii. Crop rotation
 - iii. Alley cropping systems
 - iv. Organic farming
 - v. Ridging (10 Marks)
- b) Name the six agro ecological zones found in Kenya. (6 Marks)
- c) List down four methods of plant propagation. (4 Marks)
- d) Name five (5) methods of planting. (5 Marks)
- e) Compound fertilizers are commonly preferred than single fertilizers, what advantages do they have in their general usage. (5 Marks)

QUESTION TWO (15 MARKS)

- a) Planner F1 maize variety is spaced at 100cm x 50cm during planting, calculate maize population in an Hecate piece of land using the plant spacing. (5 Marks)
- b) Name and briefly explain three climatical factors influencing agriculture in Kenya. (6 Marks)
- c) What are the mostly used methods of fertilizer application? (4 Marks)

QUESTION THREE (15 MARKS)

- a) List down five problems associated with organic manure. (5 Marks)
- b) Name and briefly discuss four methods of disease and pest control used in agriculture. (10 Marks)

QUESTION FOUR (15 MARKS)

Define layering and using diagrams discuss four methods of layering. (15 Marks)

QUESTION FIVE (15 MARKS)

- a) Define pruning and give four objectives why it is carried out in plants. (5 Marks)
- b) Outline the five techniques applied during pruning. (10 Marks)