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University Examinations 2013/2014

FIRST YEAR, FIRST SEMESTER EXAMINATIONS FOR DIPLOMA IN AGRICULTURE
AND
FIRST YEAR, FIRST SEMESTER EXAMINATIONS FOR CERTIFICATE IN
AGRICULTURE

AGR 0120: PRINCIPLES OF CROP PRODUCTION

DATE: APRIL 2014

TIME: 1 ½ HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE – (30 MARKS)

- (a) Define the following terms as used in agriculture:
- | | |
|------------------------------|-----------|
| (i) Grafting | (2 Marks) |
| (ii) Pruning | (2 Marks) |
| (iii) Alley cropping systems | (2 Marks) |
| (iv) Primary cultivation | (2 Marks) |
| (v) Levelling | (2 Marks) |
- (b) Describe briefly the term crop ecology. (2 Marks)
- (c) Climate plays a major role in Agriculture, name and explain briefly four factors of climate that affect Agriculture. (8 Marks)
- (d) What are the objectives of pruning? (4 Marks)
- (e) What are four effects of burning vegetation in agricultural land? (4 Marks)
- (f) Define the term agriculture. (2 Marks)

QUESTION TWO – (15 MARKS)

- (a) Differentiate with details between crop rotation and organic farming. (5 Marks)
- (b) Name and discuss briefly four methods of disease and pest control used in agriculture. (10 Marks)

QUESTION THREE – (15 MARKS)

- (a) Name and explain briefly five economic importance of agriculture in Kenyan economy. (10 Marks)
- (b) Name five harmful effects of cultivation. (5 Marks)

QUESTION FOUR – (15 MARKS)

- (a) Outline how to prepare compost manure by use of diagrams. (10 Marks)
- (b) Give five reasons why green manure is not commonly used. (5 Marks)

QUESTION FIVE – (15 MARKS)

- (a) Coffee is generally spaced at 150cm between plants by 200cm between rows, what is the plant population in 1 hectare piece of land (show your calculations). (5 Marks)
- (b) Outline the five reasons for harvesting a crop before it reaches full maturity. (5 Marks)
- (c) Compound fertilizers are commonly used and preferred than single fertilizers, what advantages do they have in their general usage. (5 Marks)