

**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

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**University Examinations 2014/2015**

FIRST YEAR, FIRST SEMESTER EXAMINATION FOR CERTIFICATE IN AGRICULTURE

**AGR 0120: PRINCIPLES OF CROP PRODUCTION**

**DATE: APRIL 2015 TIME:** $1½$**HOURS**

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

**QUESTION ONE – (30 MARKS)**

1. Explain the meaning of Agriculture in terms of art, science and practice of farming.

(6 Marks)

1. Discuss the importance of Agriculture in Kenyan economy. (4 Marks)
2. Differentiate between conventional tillage and conservation tillage. (4 Marks)
3. Briefly describe the following terms; (6 Marks)
4. Companion cropping
5. Multistoried cropping
6. Farming systems
7. Describe briefly the characteristics of Agro-ecological zone III (4 Marks)
8. Highlight three advantages of crop rotation. (3 Marks)
9. Briefly describe the economic importance of insects pests. (3 Marks)

**QUESTION TWO (15 MARKS)**

1. Explain how social and economic factors affect agriculture. (6 Marks)
2. Describe the advantages of sexual propagation. (4 Marks)
3. State the importance of grafting in fruit trees. (3 Marks)

**QUESTION THREE (15 MARKS)**

1. Discuss the principles considered when practicing crop rotation. (5Marks)
2. Describe the economic importance of weeds in Agriculture. (5 Marks)
3. A crop is planted at spacing of 30 by 10 cm. By showing your working, calculate the plant population in a plot of land measuring 12 by 9m. (3 Marks)
4. State the factors that influence the plant population in a given area. (2 Marks)

**QUESTION FOUR (15 MARKS)**

1. State the reasons for farmers to plant their crops early. (3 Marks)
2. Describe the broadcasting method of planting over the seed drilling. (3 Marks)
3. Write short notes on the following terms; (6 Marks)
4. Seed inoculation
5. Chitting
6. Budding
7. State three advantages of asexual method of propagation. (3 Marks)