



**MERU UNIVERSITY COLLEGE
OF SCIENCE & TECHNOLOGY**

P.O. Box 972-60200 Meru - Kenya. Tel: 020-2092048, 020 2069349
Fax: 020-8027449

University Examinations 2011/2012

FIRST YEAR, FIRST SEMESTER EXAMINATION FOR DIPLOMA IN
AGRICULTURAL EDUCATION AND EXTENTION/CERTIFICATE IN
AGRICULTURE

AGR 0120: PRINCIPLES OF CROP PRODUCTION

DATE: DECEMBER 2011

TIME: 1½ HOURS

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

QUESTION ONE – (30 MARKS)

- (a) Discuss the importance of crop production in our economy. (10 Marks)
- (b) Outline the merits and demerits of weeds. (6 Marks)
- (c) Describe the purpose of secondary tillage. (4 Marks)
- (d) Explain the following categories of fertilizers:
 - (i) Complete inorganic fertilizers
 - (ii) Slow-release fertilizers (4 Marks)
- (e) Describe the following terminologies as used in crop production:
 - (i) Relay cropping
 - (ii) Multiple cropping (6 Marks)

QUESTION TWO – (15 MARKS)

- (a) Discuss the importance of pruning. (10 Marks)
- (b) Outline five basics of when and how to prune. (5 Marks)

QUESTION THREE – (15 MARKS)

- (a) Discuss three methods of grafting. (9 Marks)
- (b) State the advantages of grafting. (6 Marks)

QUESTION FOUR – (15 MARKS)

- (a) Discuss the edaphic factors that influence crop production. (10 Marks)
- (b) Describe two methods of fertilizers placement (5 Marks)

QUESTION FIVE – (15 MARKS)

- (a) What is seed inoculation? (2 Marks)
- (b) Describe the procedure for seed inoculation (5 Marks)
- (c) Discuss the factors that determine plant population. (8 Marks)