



# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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## University Examinations 2015/2016

SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF  
BACHELOR IN AGRICULTURE EDUCATION ,EXTENSION AND BACHELOR IN  
AGRICULTURE,BACHELOR IN FOOD SCIENCE AND NUTRITION, BED SCIENCE,  
BACHELOR IN FOOD SCIENCE AND TECHNOLOGY AND BACHELOR IN HUMAN  
NUTRITION AND DIETETICS

### AAA 3200: PRINCIPLES OF CROP PRODUCTION

DATE: NOVEMBER 2015

TIME: 2 HOURS

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

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#### QUESTION ONE (30 MARKS)

- a) Explain the three main ways of classifying crop plants and in each case indicate the basis of the classifications (6Marks)
- b) Explain how planting depth influences germination of seeds and exploitation of soil based resources (6 Marks)
- c) Distinguish :
  - i) Crop plant from weed
  - ii) Root crop from tuber crop
  - iii) Relay from ratoon crop
  - iv) Filler crop from intercrop (8 Marks)
- d) Explain the significance of light, temperature and moisture as determinants of plant growth as in this expression( $GI=LI+TI+MI$ ) (10 Marks)

**QUESTION TWO (20 MARKS)**

- a) Highlight the internal factor that influence crop yield (8 Marks)
- b) Describe the factors that influence tillage operations (6 Marks)
- c) Explain the measures to take in order to increase the germination rate of seeds (6 Marks)

**QUESTION THREE (20 MARKS)**

- a) Explain the significance of Agri-meteorology in crop production (10 Marks)
- b) Outline five major crops grown in Kenya indicating their common name, family and species name (10 Marks)

**QUESTION FOUR (20 MARKS)**

- a) Highlight the principles of crop rotation (5 Marks)
- b) Explain the precaution measures to consider when using herbicide for weeds control (5 Marks)
- c) Describe the harvesting determinants in cereal crops (10 Marks)