



# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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## University Examinations 2012/2013

SECOND YEAR, SECOND SEMESTER EXAMINATIONS FOR CERTIFICATE/DIPLOMA IN  
AGRICULTURE

### AGR 0223: PERENNIAL CROPS

**DATE: AUGUST 2013**

**TIME: 1½HOURS**

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

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#### QUESTION ONE – (30 MARKS)

- a. State the optimum ecological requirements for tea production. (10 Marks)
- b. Differentiate between single stem and multiple stem pruning of coffee. (4 Marks)
- c. Explain the factors that influence sugarcane quality after harvesting. (6 Marks)
- d. State the factors which affect the quality of pyrethrum flowers produced. (4 Marks)
- e. Name the causal agent and state one control of the following crop diseases.
  - i. Coffee berry disease (3 Marks)
  - ii. Armlulborra root rot (2 Marks)
  - iii. Sugarcane smut (2 Marks)

#### QUESTION TWO – 15 MARKS

- a. Explain the transplanting process of coffee seedlings in the main field. (7 Marks)
- b. Differentiate between cherry and parchment coffee. (4 Marks)
- c. State four factors which affect the quality of coffee produced in the farm. (4 Marks)

#### QUESTION THREE – 15 MARKS

- a. Sugarcane is established using stem cuttings. State the factors considered when selecting a variety to plant in a given area. (5 Marks)
- b. Explain the process of establishing sugarcane planting materials and the remedial actions for varieties with poor regenerative potential. (10 Marks)

#### QUESTION FOUR – 15 MARKS

- a. State the factors which affect the pyrethrum content in pyrethrum flowers. (8 Marks)
- b. Describe the post harvesting practices of handling pyrethrum flowers. (7 Marks)

**QUESTION FIVE – 15 MARKS**

- a. Outline the two tea pruning methods. (4 Marks)
- b. What are the main uses of pyrethrum? (4 Marks)
- c. State the symptoms and control of bacterial blight in coffee. (4 Marks)
- d. Outline the stages of sugarcane processing. (3 Marks)