



**MERU UNIVERSITY COLLEGE
OF SCIENCE & TECHNOLOGY**

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University Examinations 2010/2011

**SECOND YEAR, SECOND SEMESTER EXAMINATIONS FOR DIPLOMA IN
AGRICULTURAL EDUCATION AND EXTENSION**

AGR 0223: PERENNIAL CROPS

DATE: APRIL 2011

TIME: 1½ HOURS

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

QUESTION ONE – (30 MARKS)

- (a) State any six factors which affect the quality of coffee produced in the farm. (5 Marks)
- (b) What qualities should a farmer consider when selecting tea mother bushes for obtaining the stem cuttings? (5 Marks)
- (c) Sugar cane is established using stem cuttings. State the factors considered when selecting a variety to plant in a given area. (5 Marks)
- (d) (i) Drying is a post-harvesting handling practice undertaken in Pyrethrum. What are the three drying methods used. (3 Marks)
- (ii) State the factors which affect the quality of pyrethrum flowers produced. (4 Marks)
- (e) Name the casual agent and stage one control method of the following crop diseases. (8 Marks)
- (i) Armillaria root rot
 - (ii) Coffee berry diseases
 - (iii) Ratoon stunting disease
 - (iv) Coffee leaf rust.

QUESTION TWO – (15 MARKS)

- (a) Give a detailed account of all the management practices undertaken in a sleeved seedling in a nursery. (8 Marks)
- (b) Explain the transplanting process of tea seedlings in the main field. (7 Marks)

QUESTION THREE – (15 MARKS)

Give a detailed account of all the post-harvest handling techniques under taken in wet processing of coffee berries. (15 Marks)

QUESTION FOUR – (15 MARKS)

Pyrethrum clones are established in the nursery before planting in the seed-bed. Explain how one can establish a pyrethrum nursery bed and maintain it. (15 Marks)

QUESTION FIVE – (MARKS)

- (a) What the main uses of sugar cane. (5 Marks)
- (b) Give any three qualities of NCO 376 Sugar cane variety (3 Marks)
- (c) Name any three sugar pests. (3 Marks)
- (d) What are the pruning methods used in coffee. (2 Marks)
- (e) What are the two tea pruning methods? (2 Marks)