



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya

Tel: +254(0) 799 529 958, +254(0) 799 529 959, + 254 (0) 712 524 293,

Website: info@must.ac.ke Email: info@must.ac.ke

University Examinations 2024/2025

FIRST YEAR SECOND SEMESTER EXAMINATION FOR THE CERTIFICATE IN AGRICULTURE

AAC 1201: PERENNIAL CROPS

DATE: DECEMBER 2024

TIME: 1½ HOURS

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

QUESTION ONE (30 MARKS)

- a) Define the following terms in the context of perennial crop production, specifying the crop they apply to:
- Formative pruning. (2 marks)
 - Single stem pruning. (2 marks)
 - Cutting back. (2marks)
- b) List three growth and developmental stages in sorghum (3 marks)
- c) List factors that determine the plucking time in tea (5 marks)
- d) List two factors that make pyrethrum natural pesticide (2 marks)
- e) State three uses of macadamia nuts (3 marks)
- f) Name the chemical that is obtained from pyrethrum (2 marks)
- (g) Draw a well labelled diagram of a ripe coffee (4 marks)
- (h) As an agricultural extension officer, explain how you would advice farmers to improve the quality of sugar juice (5 marks)

QUESTION TWO (15 MARKS)

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Page 1

- a) Earthing up is practiced in sugarcane production. Explain the term earthing up and state its importance (5 marks)
- b) Identify and explain three parameters used to determine sugarcane maturity. (6 marks)
- c) Compare detrashing and propping. (4 marks)

QUESTION THREE (15 MARKS)

- (a) Describe the Agro-ecological requirements of sorghum (10 marks)
- (b) Give the family name of macadamia and state four uses of macadamia nuts (5 marks)

QUESTION FOUR (15 MARKS)

- a) Explain how to prepare a seedbed for planting tea seedlings under the following steps:
- Land preparation. (3 marks)
 - Spacing. (2 marks)
 - Planting holes. (2 marks)
 - Transplanting. (3 marks)
- (b) Discuss the threats posed by weeding sugarcane (5 marks)