



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)
MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR
MAIN
THIRD YEAR FIRST SEMESTER
SUPPLEMENTARY/SPECIAL EXAMINATION**

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN AGRICULTURE AND BIOTECHNOLOGY AND
AGRICULTURE EDUCATION AND EXTENSION.**

COURSE CODE: ACR 304

COURSE TITLE: PERENNIAL CROPS

DATE: _____

TIME: _____

INSTRUCTION TO CANDIDATES

Answer all questions in section A and 2 questions from section B

TIME: 3 hours

MMUST observes ZERO tolerance to examination cheating

This paper consists of 2 printed pages. Please Turn Over



Section A. Answer all questions

Question 1.

- a) Define the terms 'Training and Pruning' (2 Marks)
- b) State the reasons and objectives of training (10 Marks)
- c) Describe types of training (8 Marks)

Question 2.

Question Three. Discuss coffee under the following sub headings

- a) Nursery establishment and management (6 Marks)
- b) Land preparation (2 Marks)
- c) Planting hole and spacing (2 Marks)

Section B Answer Two Question

Question Three

- a) List three areas where pineapples are grown in Kenya (3 Marks)
- b) Name two varieties of pineapples grown in Kenya (2 Marks)
- c) Write short notes on propagation and planting of pineapples(10 Marks)
- d) Briefly explain to a farmer when to harvest pineapples and how to maintain good quality (5 Marks)

Question Four

- a) Briefly describe agronomic practices carried out in sugarcane production (10 Marks)
- b) What are some of the challenges faced by sugarcane farmers in Kenya (5 Marks)
- c) List the merits and demerits of growing perennial crops (5 Marks)

Question Five

- a) Climatic conditions for growing oil palm (2 Marks)
- b) Mention two varieties grown in Kenya (2 Marks)
- c) Describe planting and cultural practices undertaken in oil palm production (5 Marks)
- d) Mention two pests and diseases affection oil palm (4 Marks)
- e) Why is oil palm production below average in Kenya (5 Marks)
- f) Write two by products made from oil palm (2 Marks)