



**MURANG'A UNIVERSITY OF TECHNOLOGY**  
**SCHOOL OF AGRICULTURE AND ENVIRONMENTAL**  
**SCIENCES**

DEPARTMENT OF AGRICULTURE

UNIVERSITY ORDINARY EXAMINATION

2023/2024 ACADEMIC YEAR

**THIRD YEAR FIRST SEMESTER EXAMINATION**

GAC 301: PERENNIAL CROPS

DURATION: 2 HOURS

**INSTRUCTIONS TO CANDIDATES:**

1. Answer question one and any other two questions.
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

**SECTION A – ANSWER ALL QUESTIONS IN THIS SECTION**

**QUESTION ONE (30 MARKS)**

- a. Define the following terms
  - i. Soil fertility (3 marks)
  - ii. Ratoon crop (3 marks)
- b. Outline five difference between Arabica and Robusta coffee (8 marks)
- c. Discuss the cultural practises in banana crop production. (8 marks)
- d. Explain any four green leaf tea qualities for processing (8 marks)

**SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION**

**QUESTION TWO (20 MARKS)**

Discuss how climate factors influence the distribution of perennial crops in east Africa. (20 marks)

**QUESTION THREE (20 MARKS)**

Discuss the post-harvest process involved in avocado production from harvesting to reach end customers. (20 marks)

**QUESTION FOUR (20 MARKS)**

- a) Discuss the main challenges facing sugarcane production in Kenya. (10 marks)
- b) Explain how the challenges can be overcome. (10 marks)