



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

DEPARTMENT OF AGRICULTURE

UNIVERSITY ORDINARY EXAMINATION

2023/2024 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER EXAMINATION

GAC202 – PRINCIPLES OF CROP PRODUCTION & PROPAGATION

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 (30MARKS)

- a. Distinguish between the following terms
- i. Cropping systems vs cropping pattern (4 marks)
 - ii. Crop density vs leaf area index (4 marks)
 - iii. Biological yield vs economic yield (4 marks)
- b. Discuss any six factors that determine the time of sowing in crop production. (6 marks)
- c. Explain six (6) benefits of crop rotation in agriculture. (6 marks)
- d. Outline the advantages and disadvantages of conservation agriculture. (6 marks)

SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)

- a) Explain the significance of hybrid crops and how they can benefit farmers in terms of yields and diseases resistance. (10 marks)
- b) Discuss how hybrid crops benefit farmers in terms of yield and disease resistance. (10 marks)

QUESTION THREE (20 MARKS)

Discuss using appropriate one example in each case the different cultural control methods and their role in enhancing crops competitiveness against weeds. (20 marks)

QUESTION FOUR (20 MARKS)

- a) Discuss the different methods of a sexual propagation. (20 marks)
- b) Explain the advantages and disadvantages of asexual and sexual propagation. (10 marks)