



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

DEPARTMENT OF AGRICULTURAL STUDIES

ORDINARY UNIVERSITY EXAMINATION

2023/2024 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER EXAMINATION FOR BACHELOR
OF SCIENCE IN AGRICULTURE

GAC 217 – PRINCIPLES OF PLANT PATHOLOGY AND DISEASE
CONTROL

DURATION: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

1. Answer question ONE 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 – (30 MARKS) – ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE (30 MARKS)

- a) List four ways in which pathogens cause disease in plant. (4 marks)
- b) Differentiate between avoidance and exclusion in disease control. (4 marks)
- c) Identify four agents of inoculum dissemination. (4 marks)
- d) Differentiate between sign and symptoms. (4 marks)
- e) Describe four major components involved in disease triangle. (4 marks)
- f) Outline three ways in which pathogens attack plants. (3 marks)
- g) Describe three mechanisms of pathogen and plant variability. (3 marks)
- h) Outline four abiotic factors which influence plant health. (4 marks)

SECTION B (40 MARKS) – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)

Discuss disease diagnosis under Koch's postulates. (20 marks)

QUESTION THREE (20 MARKS)

Describe the stages of disease development. (20 marks)

QUESTION FOUR (20 MARKS)

Discuss classification of infectious plant diseases. (20 marks)