



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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University Examinations 2022/2023

THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF EDUCATION SCIENCE (BIOLOGY/CHEMISTRY), (BIOLOGY/MATHS),
(BIOLOGY/AGRICULTURE)

SBA 3303: PLANT PATHOLOGY

DATE: APRIL 2023

TIME: 2 HOURS

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

QUESTION ONE (30 MARKS)

- a) Distinguish between obligate and facultative parasites (4 marks)
- b) Explain what is meant by integrated plant disease management (2 marks)
- c) Highlight the characteristics of a health plant (4 marks)
- d) Describe the general symptoms of fungal diseases in plants (4 marks)
- e) Discuss the steps in diagnosing a plant disease (2 marks)
- f) Outline the pathogens that cause disease in plants (4 marks)
- g) Describe the concept of disease triangle (2 marks)
- h) Explain the following plant diseases symptoms:
 - (i) Knots (2 marks)
 - (ii) Rusts (2 marks)
- i) Explain the survival strategies of plant parasitic nematodes (4 marks)

QUESTION TWO (20 MARKS)

Discuss the role of environmental conditions in disease development (20 marks)

QUESTION THREE (20 MARKS)

- a) Explain different ways of controlling nematodes in plant varieties (5 marks)
- b) Describe the stages of disease cycle in plants (15 marks)

QUESTION FOUR (20 MARKS)

Discuss structural defence mechanisms used by plants to fight infections (20 marks)