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University Examinations 2023/2024

THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF SCIENCE IN EDUCATION

SBA 3303: PLANT PATHOLOGY

DATE: APRIL 2024

TIME: 2 HOURS

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

QUESTION ONE (30 MARKS)

- a) Distinguish between endemic and epidemic plant diseases (4 marks)
- b) Describe the concept of disease triangle (4 marks)
- c) Explain what is meant by integrated plant disease management (2 marks)
- d) Highlight the characteristics of a health plant (4 marks)
- e) Outline the pathogens that causes diseases in plants (4 marks)
- f) Explain the following plant disease symptoms
 - i. Rust (2 marks)
 - ii. Knots (2 marks)
- g) Describe the general symptoms of fungal diseases in plants
- h) Distinguish between the following
 - i. Virus and viroid (2 marks)
 - ii. Bacterial and mycoplasma (2 marks)
- i) State four ways viruses are spread in plants (4 marks)

QUESTION TWO (20 MARKS)

- a) Explain four effects of viral infections in plants (10 marks)
- b) Explain four ways of controlling viruses in plants (10 marks)

QUESTION THREE (20 MARKS)

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

QUESTION FOUR (20 MARKS)

Describe structural defense mechanism used by plants to fight infections (20 marks)

QUESTION FIVE (20 MARKS)

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