

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FOURTH YEAR EXAMINATIONS FOR THE AWARD OF DEGREE
OF BACHELOR OF EDUCATION SCIENCE AND BACHELOR OF SCIENCE**

BOTA 453: PLANT PATHOLOGY

STREAMS: BED (SCI) BSC Y4S1

TIME: 2 HOURS

DAY/DATE: TUESDAY 9/12/2014

8.30 A.M – 10.30 A.M.

**INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION A AND TWO
QUESTIONS IN SECTION B**

1. Highlight five mechanisms by which pathogens cause plant disease. [5 marks]
2. (a) Indicate the roles of the following individuals in the development of plant pathology. [2 marks]
 - (i) Millardet
 - (ii) Theophrastus(b) Differentiate between the following terms:
 - (i) Sign and symptoms
 - (ii) Infection and invasion
 - (iii) Virulence and tolerance
3. Outline the roles of KEPHIS in the management of plant pest and diseases in the country. [5 marks]
4. (a) With the help of appropriate examples, explain three ways in which pathogens hinder water movement in plant. [8 marks]
(b) Explain why the respiration process is upset in infected plant. [2 marks]

5. (a) Describe three types of plant resistance to pathogen. [3 marks]
(b) Explain two methods of disease measurement. [2 marks]
6. Write short notes on *Citrus tristeza* disease.

SECTION B: ESSAY (40 MARKS)

7. Describe the roles of various chemical in disease formation
8. Write an essay on southern Bacterial wilt of solanaceous plants.
9. Discuss the biological control of plant diseases.
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