**CHUKA** 



### **UNIVERSITY**

#### UNIVERSITY EXAMINATIONS

# EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE, BACHELOR OF EDUCATION SCIENCE, BACHELOR OF AGRICULTURAL EDUCATION AND EXTENSION

**BOTA 453: PLANT PATHOLOGY** 

STREAMS: BSc, B. ED (SCIENCE), AGEX

TIME: 2 HOURS

DAY/DATE: MONDAY 27/09/2021 11.30 A.M. – 1.30 P.M.

### **INSTRUCTIONS**

- Answer all questions in SECTION A and two questions in SECTION B
- Do not write anything on the question paper
- Answer each question on a fresh page

## **SECTION A SHORT ANSWER QUESTIONS (30 MARKS)**

1. The table below shows the contributions of various individuals to the development of plant pathology. Fill the gaps with the right name of the scientist or the contribution made by the scientist. (5 marks)

	Name of the person	Contribution
a	Antonia Micheli	
b		Reported the first nematode in wheat
c	Millardet	
d	Anton deBary	
e		Established a procedure for disease diagnosis

2. a) Name the pathogen that causes the bacterial soft rot disease of carrots. (1 mark)

	b) List four symptoms associated with bacterial soft rot disease.	(2 marks)		
	c) Suggest four management option for the bacterial soft rot disease.	(2 marks)		
3.	Explain five advantages of using integrated pest management approach in management			
	plant pathogen.	(5 marks)		
4.	Explain five ways by which plant parasitic nematodes induce plant diseases. (5 marks)			
5.	Describe five steps in plant disease diagnosis.	(5 marks)		
6.	Using the disease triangle explain the disease concept.	(5 marks)		
SECTION B: ESSAY QUESTIONS (40 MARKS)				
7.	Discuss the biological methods of plant disease management.	(20 marks)		
8.	a) Discuss factors that affect disease epidemics.	(10 marks)		
	b) Describe modern tools for epidemiological study.	(10 marks)		
9.	Describe the classification of plant diseases.	(20 marks)		