BOTA 251

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF BACHELOR OF EDUCATION SCIENCE & BACHELOR OF SCIENCE

BOTA 251: INTRODUCTION TO PLANT PATHOLOGY

STREAMS: BOTA Y2 TIME: 2 HOURS

DAY/DATE: MONDAY 20/04/2020 8.30 A.M – 10.30 A.M.

INSTRUCTIONS

- Answer All questions in Section A and any Two 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.a) Outline three advantages of IPM as a plant disease management strategy. [3 Marks]

b) Fill the table below with the correct name of the disease or the pathogen. [2 Marks]

Disease		Pathogen
i)		Hemileia vastatrix
ii)	Crown gall	
iii)		Radopholus similis
iv)	Southern bacterial wilt	

2. Discuss pathogen survival mechanisms.

[5 Marks]

3. Describe the process of isolating bacterial pathogen from a diseased plant material.

[5 Marks]

4. Explain five preformed structural defence mechanisms in plant.

[5 Marks]

5. Using the disease triangle concept explain the process of disease formation.	[5 Marks]		
6. Describe five common symptoms associated with virus infection.	[5 Marks]		
SECTION TWO: ESSAY QUESTIONS [40 MARKS]			
7. Discuss methods used by pathogens to penetrate their hosts.	[20 Marks]		
8. Describe the life cycle of cyst nematodes.	[20 Marks]		
9. Discuss biological methods of disease Management.	[20 Marks]		