



**KISII UNIVERSITY**  
**UNIVERSITY EXAMINATIONS**

**FOURTH YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF**  
**BACHELOR OF EDUCATION SCIENCE**  
**FIRST SEMESTER 2022/2023**  
**(JUNE - SEPTEMBER, 2022)**

**BOTA 453: PLANT PATHOLOGY**

**STREAM: Y4 S1**

**TIME: 2 HOURS**

**DAY: THURSDAY, 12:00 PM – 2:00 PM**

**DATE: 08/09/2022**

**INSTRUCTIONS:**

- 1. Do not write anything on this question paper.**
- 2. Answer ALL Questions in section A (Compulsory) and any other TWO in section B**

**SECTION A (40MARKS)**

1. What are the main characteristics of plant viruses? (5marks)
2. Describe three key criteria of successful disease control? (5marks)
3. What is a plant disease and what causes plant diseases? (5 marks)
4. Briefly explain the principles of plant pathology. (5marks)
5. Briefly discuss how nematodes cause injuries to plants. (5marks)
6. Explain the economic importance of plant diseases. (5marks)
7. Briefly explain the chemical control method of plant diseases. ( 5marks)
8. Explain how genetic engineering can be used to control plant viruses. (5marks)

**SECTION B (30MARKS)**

9. (a) Discuss the biological control of plant diseases. (10marks)
- (b) Briefly explain the symptoms of Target spot disease in tomatoes.(5marks)
10. (a) Discuss the processes in a disease cycle. (15marks)
- (b) Briefly name the causative agent and the host of soft rot bacterial disease and discuss the symptoms. (5marks)
11. Discuss the strategies used in intergrated pest management.(IPM) (15marks)