

**SPECIFY TYPE OF
EXAMINATION**

FIRST ATTEMPT
FIRST RESIT
SECOND RESIT
RE-TAKE



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF AGRICULTURAL AND FOOD SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
AGRIBUSINESS MANAGEMENT
2TH YEAR 2ND SEMESTER 2021/2022 ACADEMIC YEAR
SIAYA CAMPUS**

COURSE CODE: APT 3216

COURSE TITLE: PLANT PATHOLOGY

DATE:

TIME:

Instructions:

- 1. Answer ALL questions in Section A and B and ANY other TWO questions in Section C**



Registration No.....

SECTION A: 20 Marks (Each question carries 2 marks)

1. List four (4) living causes of plant disease
2. Name two (2) disease epidemics of historical importance in agriculture and the responsible pathogens
3. Briefly outline two economic effects of plant disease on a crop enterprise?
4. Describe the term dieback
5. Define Quarantine in plant disease control
6. What is infectivity in plant disease cycle.
7. List two bacterial plant pathogens
8. List two fungal plant pathogens
9. List four sources of plant disease inoculum
10. List two benefits of using chemical pesticides to control plant diseases

SECTION B: 30 Marks

1. Outline the economic importance of plant disease in Kenyan agriculture (5 Marks)
2. Which are the environmental conditions affecting disease epidemics (5Marks)
3. Explain the effects of plant resistance on pathogen development (5 Marks)
4. Explain the transmission of viral and bacterial diseases in plants (5 Marks)
5. What are the physiological and biochemical mechanisms of plant resistance (5 Marks)
6. Describe pesticide formulations (5 Marks)

SECTION C: 20 Marks Answer ANY two question

1. Describe in detail any one of the plant diseases caused by the pathogens below(10 Marks)
 - i. *Erwinia carotovora pv carotovora*
 - ii. *Fusarium oxysporum f.sp. Cubense*
 - iii. *Phytophthora infestans*
 - iv. Cucumber Mosaic Virus



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2. Proper diagnosis of plant problems is a key factor in plant health management. Describe the key steps in plant disease diagnosis. (10 Marks)
3. Explain in detail how plant biotechnology is applied in disease control (10 Marks)