



EMBU UNIVERSITY COLLEGE
(A Constituent College of the University of Nairobi)

2015/2016 ACADEMIC YEAR

FIRST SEMESTER EXAMINATION

FIRST YEAR EXAMINATION FOR DIPLOMA IN CROP PROTECTION

ACP 013: INTRODUCTION TO PLANT PATHOLOGY

DATE: 10th DECEMBER 2015

TIME: 11:00-13:00

INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions.

QUESTION ONE

- a) Define the following terms as used in plant pathology (5 marks)
- i) Pathogen
 - ii) Inoculum
 - iii) Pathogenesis
 - iv) Pathogenecity
 - v) Virulence
- b) Differentiate between monocyclic and polycyclic plant diseases (3 marks)
- c) Explain the Koch's postulates (5 marks)
- d) Explain factors that influence plant disease development (4 marks)
- e) Discuss symptoms expressed by plants infected with root knot nematodes (4 marks)
- f) Differentiate between disease incidence and disease severity as used in plant disease assessment (4 marks)
- g) Maize is an important food crop in Kenya and is currently facing production constraints due to Maize Lethal Necrosis Disease. Discuss the vectors and the symptoms of the disease (5 marks)

QUESTION TWO

Discuss stages in plant disease development

(20 marks)

QUESTION THREE

You have been employed as a technical manager in an agricultural firm that specializes in coffee and tomatoes production. Among the challenges they encounter are Coffee berry disease and Bacterial wilt of tomatoes. As a manager you are required to offer technical solutions to these diseases.

- a) Discuss the challenges in coffee berry disease (10 marks)
- b) Discuss the challenges in bacterial wilt of tomatoes (10 marks)

QUESTION FOUR

Explain how pathogens are able to survive in the environment thus causing plant diseases

(20 marks)

QUESTION FIVE

- a) Describe the different ways by which plant viruses can be transmitted (10 marks)
- b) Discuss the different strategies that can be used to control/prevent plant viral diseases

(10 marks)

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