UNIVERSITY OF EMBU

2016/2017 ACADEMIC YEAR

SECOND SEMESTER EXAMINATION

SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN RANGE MANAGEMENT

ACP 201: PRINCIPLES OF PLANT PATHOLOGY AND DISEASE CONTROL

DATE: APRIL 13, 2017   TIME:11:00AM-1:00PM

INSTRUCTIONS:

Answer Question ONE and ANY other TWO Questions

QUESTION ONE

a) Name any four abiotic disease causing agents   (2 Marks)

b) Name any four methods that could be used in the identification of bacteria   (4 Marks)

c) Outline the characteristics of fungi   (4 Marks)

d) Differentiate patterns of disease symptoms caused by biotic agents from patterns of
   symptoms caused by abiotic agents   (2 Marks)

e) Describe any four ways fungi are disseminated   (4 Marks)

f) Describe how recombination leads to variability in pathogens   (2 Marks)

g) Outline how environment could influence the development of plant diseases   (3 Marks)

h) Outline the conditions that must be met by a host for disease to occur   (2 Marks)

i) State the techniques used in the measurement of plant disease intensity   (4 Marks)

j) Briefly explain how plant nutrition is used in plant disease management   (3 Marks)

QUESTION TWO

a) Describe any five cultural practices that promote the spread and development of plant diseases. (10 Marks)

b) Discuss sources of inoculum and inoculation of plant pathogenic agents (10 Marks)

QUESTION THREE

a) Discuss how virus transmission occurs in plants (10 Marks)

b) You have been asked by a farmer to visit his farm in order to diagnose a possible disease attack. Discuss factors regarding disease symptoms that you will need to review to accurately diagnose the disease (10 Marks)

QUESTION FOUR

a) Discuss regulatory disease control measures and its limitations (10 Marks)

b) Discuss the use of biofumigants and the mechanisms of action of antagonistic microorganisms (10 Marks)

QUESTION FIVE

a) Discuss any five techniques used in the identification of plant pathogenic fungi

(10 Marks)

b) Discuss the visual assessment methods of disease severity (10 Marks)

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