



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations 2015/2016

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

FIRST/SECOND SEMESTER EXAMINATION FOR DIPLOMA IN AGRICULTURAL
EDUCATION AND EXTENSION

SBT 0205: PLANT PATHOLOGY THEORY

DATE: 11/8/2016

TIME: 2.00-4.00 PM

INSTRUCTIONS

1. This paper has sections A and B.
2. Section A has one compulsory question. Answer all questions in this section (totaling to 30 marks)
3. Answer any two questions in section B (totaling to 20 marks each)

SECTION A (30 MARKS)

QUESTION ONE (COMPULSORY)

- a) Explain the following terminologies with respect to plants:
 - i) Disease (2 marks)
 - ii) Epidemiology (2 marks)
 - iii) Pathogenicity (2 marks)
 - iv) Damping off (2 marks)
- b) Explain the role of each of the four factors considered in a disease tetrahedron. (4 marks)
- c) Describe three banana bacterial wilt disease symptoms and explain three management strategies (6 marks)
- d) Integrated Pest Management contributes to environmental safety. Give two reasons that justify this statement. (2 marks)

SECTION B: ANSWER ANY TWO QUESTIONS

QUESTION TWO

- a) Explain four symptoms of cassava brown streak disease. (8 marks)
- b) Discuss any 6 strategies that are used to control virus diseases affecting plants. (12 marks)

QUESTION THREE

- a) Give one example of a pathogen for each of the following three classes of fungi; Ascomycetes; Basidiomycetes; Deuteromycetes and indicate one characteristic feature for each. (6 marks)
- b) Explain the role of seven factors that affect the development of disease epidemics. (14 marks)

QUESTION FOUR

- a) Explain the effect of five factors that cause abiotic diseases in plants. (10 marks)
- b) Describe 5 agents that cause biotic diseases to plants and the effect of each on plant growth citing one example for each. (10 marks)

QUESTION FIVE

- a) Discuss three nematode species that affect the banana crop and the symptoms they cause. (10 marks)
- b) Explain five management strategies used in the management of plant parasitic nematodes in banana production. (10 marks)