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University Examinations 2012/2013

SECOND YEAR, FIRST SEMESTER EXAMINATION FOR DIPLOMA IN AGRICULTURE

BIO 0112: ENTOMOLOGY AND PLANT PATHOLOGY

DATE: AUGUST 2013

TIME: 1 ½ HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (30 MARKS)

- a) Define the following terms
 - i. Epidemiology (2 Marks)
 - ii. Symptom complex (2 Marks)
 - iii. Susceptibility (2 Marks)
 - iv. Biological pest control (2 Marks)
 - v. Integrated pest management. (2 Marks)
- b) Explain pest management by pest resistance. (4 Marks)
- c) Accurate diagnosis is important for effective control of plant diseases. Explain the principles of disease diagnosis. (5 Marks)
- d) List three advantages of chemical pest control. (3 Marks)
- e) With the use of an example, explain crop rotation as a method of pest control. (4 Marks)
- f) State the general characteristics of insects. (4 Marks)

QUESTION TWO (15 MARKS)

- a) Explain the disease triangle. (5 Marks)
- b) Discuss disease management by exclusion. (10 Marks)

QUESTION THREE (15 MARKS)

- a) Explain the epidemiology and control of damping off disease. (5 Marks)
- b) Discuss panama disease of bananas under the following headings.
 - i. Etiology (2 Marks)
 - ii. Symptoms (4 Marks)

iii. Control (4 Marks)

QUESTION FOUR (15 MARKS)

- a) Name five pest management methods. (5 Marks)
- b) Discuss the mechanical pest control strategy. (10 Marks)

QUESTION FIVE (15 MARKS)

- a) Discuss chemical pest control under the following
- i. Factors affecting efficiency of pesticides. (5 Marks)
 - ii. Disadvantages of chemical methods. (5 Marks)
- b) In which ways does each of the following cultural practices control pests?
- i. Close season (3 Marks)
 - ii. Field hygien (2 Marks)