



**MERU UNIVERSITY COLLEGE
OF SCIENCE & TECHNOLOGY**

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University Examinations 2011/2012

SECOND YEAR, FIRST SEMESTER EXAMINATIONS FOR DIPLOMA IN AGRICULTURE

BIO 0112: ENTOMOLOGY AND PLANT PATHOLOGY

DATE: AUGUST 2011

TIME: 1½ HOURS

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

QUESTION ONE – (30 MARKS)

- (a) Define metamorphosis and explain ‘complete metamorphosis’ (10 Marks)
- (b) Explain four characteristics of the class hexapoda. (8 Marks)
- (c) List any two insect orders containing agricultural pests. (4 Marks)
- (d) Define a plant disease and explain a plant disease pyramid (disease triangle). (8 Marks)

QUESTION TWO – (15 MARKS)

Name and explain five natural forces that affect pest populations. (15 Marks)

QUESTION THREE – (15 MARKS)

Pesticides can be classified according to how or when they work. Explain the following five groups:

- (a) Contact pesticides (3 Marks)
- (b) Systemic pesticides (3 Marks)
- (c) Foliar pesticides (3 Marks)
- (d) Soil-applied pesticides (3 Marks)
- (e) Fumigants (3 Marks)

QUESTION FOUR – (15 MARKS)

- (a) State what you need to know in order to identify and control a pest. (5 Marks)
- (b) Explain:

(i) Beneficial insects

(5 Marks)

(ii) Neutral insects

(5 Marks)

QUESTION FIVE – (15 MARKS)

Explain the following:

(a) Leaf spots

(5 Marks)

(b) Cankers

(5 Marks)

(c) Damping off

(5 Marks)