

Uganda Martyrs University

Faculty of Agriculture

B. Agriculture 2, Semester I Final Assessment: 2015/2016

Course Unit: CPD 2101 CROP PEST AND DISEASES MANAGEMENT

Time: 9:30 am – 12:30 pm

Date: Wednesday, 02nd December, 2015

Instructions:

- Answer any four questions
- Do not write anything on a question paper
- Time: Three hours

- Qn 1** a) Explain the factors affecting herbicide effectiveness (10 marks)
- b) What are the problems associated with the use of herbicides? (10 marks)
- c) How can herbicide resistance by weeds be overcome by a farmer? (5 marks)
- Qn 2** Nematodes are referred to as the 'unseen enemy'. Discuss their classification according to plant-nematode interactions (25 marks)
- Qn 3** Using suitable examples, describe the relationship between parasitism and pathogenicity in plant pathology (25 marks)
- Qn 4** Weeds are usually referred to as crops growing where they are not wanted. Explain (10 Marks).
- b) Using twelve examples of weeds, give their common and botanical names (25 marks)
- Qn 5** a) Explain the characteristics of only three fruiting bodies in the class ascomycetes (15 marks)
- b) Describe the mechanical methods of weed control (10 marks)
- Qn 6** Using a suitable illustration, explain the disease cycle, symptoms and control strategies of *Phytophthora infestans* (25 marks)
- Qn 7** Clearly outline the difference between the following terminologies as used in plant pathology (25 marks)
- Powdery mildew and Downy mildew
 - Monocyclic and Polycyclic disease cycles
 - Vertical resistance and Horizontal resistance
 - Disease cycle and Disease triangle

Qn 8 a) Using a suitable illustration, clearly explain the general rust life cycle (20 marks)

b) Define the following terms

i - Dikaryotic nucleus

2 marks

ii - Diploid nucleus

1 mark

iii - Haploid nucleus

1 mark

iv - Appresorium

1 mark