



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**

**SECOND/THIRD YEAR FIRST SEMESTER UNIVERSITY EXAMINATION**

**2017/2018 ACADEMIC YEAR**

**REGULAR**

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**COURSE CODE: APT 3216**

**COURSE TITLE: PLANT PATHOLOGY**

**EXAM VENUE: LAB 7**

**STREAMS: Bsc. Horticulture**

**DATE: 15/12/17**

**Bsc. Agribusiness management**

**TIME: 2 HOURS**

**EXAM SESSION: 2.00 – 4.00PM**

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**Instructions:**

**Answer ALL questions in section A and ANY other 2 Questions in section B.**

**Candidates are advised not to write on question paper.**

**Candidates must hand in their answer booklets to the invigilator while in the examination room.**

**SECTION A [30 MARKS]**

**Answer ALL questions from this Section.**

1. Why is knowledge of plant pathology important (4marks)
2. Define the following terms as used in plant pathology :
  - A) inoculums. (2 marks)
  - B) pathogenesis. (2 marks)
  - C) Disease severity. (2marks)
  - D) toxins. (2marks)
3. Name six agent of infectious and non-infectious plant diseases (6 marks)
4. Differentiate between a disease sign and a disease symptom, giving examples. (6 marks)
5. Explain the following principles and methods of disease control in crops :
  - Biological (2 marks)
  - Chemical (2 marks)
6. Name two phyla of pathogenic fungi (2 marks)

**SECTION B [40 MARKS]**

**Answer ANY TWO questions from this Section.**

7. Discuss bacteria as a plant pathogen under the following sub-heading :
  - A) classification. (5 marks)
  - B) bacterial diseases. (5 marks)
  - C) Symptom of attack. (10 marks)
8. Describe the following stages in a fungal disease development.
  - A) Inoculation. (4 marks)
  - B) Infection /penetration (8 marks)
  - C) pathogenesis. (4marks)
  - D) symptom. (4 marks)
9.
  - A) Discuss the effect of environmental factors on plant diseases. (10 marks)
  - B) Explain various methods of plant disease control. (10 marks)