JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

THIRD YEAR FIRST SEMESTEREXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE AGRIBUSINESS MANAGEMENT - 2013/2014 ACADEMIC YEAR

APT 3313: CROP PROTECTION

Instructions:

1. This paper consists of **TWO** sections, **A** and **B**.
2. Answer **ALL** questions from section **A** and any **TWO** from section **B**.
3. Write all answers in the booklet provided.

SECTION A   [30 MARKS]

Answer ALL questions.

1. Define the following terms in crop protection:
   a) Plant quarantine.   [2marks]
   b) Field sanitation.   [2marks]
   c) Pest surveillance.   [2marks]

2. Describe the role of KEPHIS in crop pest control in Kenya.   [3marks]

3. Distinguish between the following with examples:
   a) LC_{50} and LD_{50}.   [2marks]
   b) Import permit and phytosanitary certificate.   [2marks]
   c) Acaricide and Nematicide.   [2marks]

4. Explain the following types of poisoning / toxicity from use of pesticides with examples.
   a) Mutagenicity.   [2marks]
   b) Oncogenicity.   [2marks]
   c) Teratogenicity.   [2marks]

5. List 3objectives of pesticide formulation and how they affect choice ofapplication equipment.   [3marks]

6. Analyse the suitability of the following order of crops in a rotation programme:

   a) Main crop(M)– Solanaceous, crucifers, cucurbits.
   b) Legumes(L)– beans.
   c) Root Crops (R) – carrot; sweet potato.
   d) Optionals(O) – lettuce, spinach.
   e) Dry crops(D) – corn.   [6marks]

SECTION B   [40 MARKS]

Answer ANY TWO questions.

7. Discuss the importance of using an integrated crop management system with specific reference to EIL and ETL.   [20marks]

8. List and describe briefly five methods used to eliminate pests from planting material.[20marks]

9. Choose a crop of economic importance in Kenya and discuss the common pests associated with it and the control methods recommended.   [20marks]