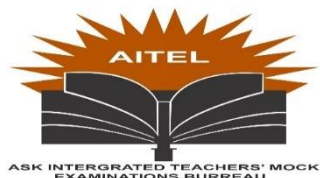


**P515/2**  
**PRINCIPLES AND PRACTICES**  
**OF AGRICULTURE**

(Theory)  
Paper 2  
**July/Aug. 2022**  
**3 hours.**



**AITEL JOINT MOCK EXAMINATIONS**

**Uganda Advanced Certificate of Education**  
**PRINCIPLES AND PRACTICES OF AGRICULTURE**

**(THEORY)**

**Paper 2**

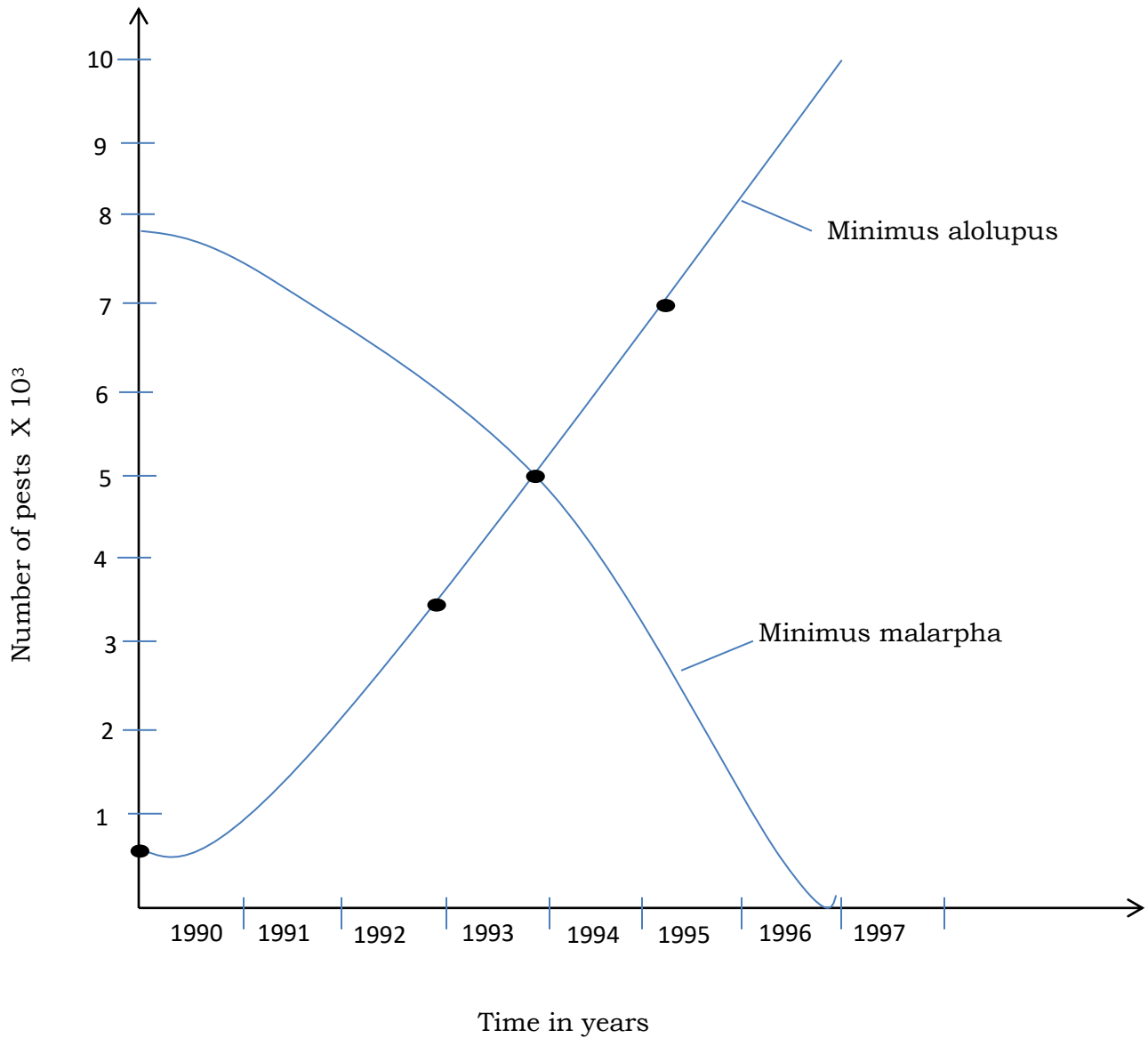
**3 Hours**

**INSTRUCTIONS TO CANDIDATES:**

*This paper consists of four sections **A, B, C, D** and **E**  
Answer question **one** in section **A** and any other **four** questions from each of the sections **B, C, D** and **E**.*

## SECTION A

1. A graph below shows the effect of a pesticide which the farmer used to eradicate the population of pests *minus morlarpha alolupus* species over a period of seven years. Study it carefully and answer the questions that follow;



- Describe how the numbers of the two pests changed due to the effect of the pesticide. (4 marks)
- Explain why the numbers of the two pests changed as observed on the graph above. (8 marks)
- Outline the characteristics of a good pesticide. (4 marks)
- Explain the disadvantages of chemical control of pests. (4 marks)

## SECTION B

### CROP PRODUCTION

2. a) Explain the ways in which Nitrogen is added to the soil. (6 marks)
- b) Give the factors that influence symbiotic nitrogen fixation. (7 marks)
- c) Write the importance of nitrogen in crop production. (7 marks)
3. a) Outline the advantages of seed dormancy. (4 marks)
- b) Describe the various methods of breaking seed dormancy. (6 marks)
- c) What are the factors to consider before selecting crop varieties to plant? (10 marks)

## SECTION C

### ANIMAL PRODUCTION

4. a) Outline the characteristics of a good room for brooding. (8 marks)
- b) What are the management practices carried out on chicks in a brooder? (12 marks)
5. a) Write the considerations to make when selecting fish species to rear. (5 marks)
- b) What factors need to be considered before setting up a fish farm? (10 marks)
- c) Explain the methods of preserving fish.

## SECTION D

### MECHANISATION

6. a) Briefly explain the following basic principles of machines;  
i) Force ii) Work  
iii) Energy iv) Power (8 marks)
- b) Describe any three simple machines that you know.

7. a) Give the precautions to take in order to prepare good quality concrete. (7 marks)
- b) What are the factors that influence the level of investment in farm buildings? (7 marks)
- c) Explain economic importance of farm buildings. (6 marks)

**SECTION E**  
**AGRICULTURE ECONOMICS**

8. a) What are the benefits of packaging goods? (5 marks)
- b) Explain the causes of fluctuation of prices of Agricultural products. (10 marks)
- c) Give the factors affecting price elasticity of demand. (5 marks)
9. a) Differentiate between technical efficiency and economic efficiency. (4 marks)
- b) Explain the factors influencing efficiency of farming. (6 marks)
- c) Explain the factors which govern choice of enterprises in a farm. (10 marks)

**END**