

**P515/2**  
**PRINCIPLES**  
**AND PRACTICES**  
**OF AGRICULTURE**  
**PAPER 2**  
**July/2023**  
**2½ Hours**

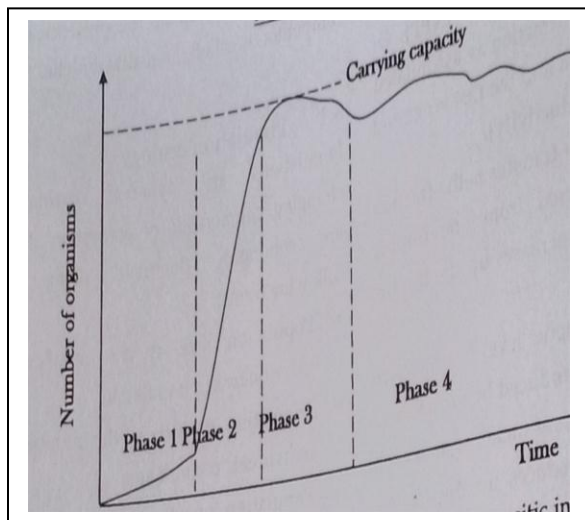
**S.5 MID TERM II EXAMINATION**  
**Uganda Advanced Certificate of Education**  
**PRINCIPLES AND PRACTICES OF AGRICULTURE**

***INSTRUCTIONS TO CANDIDATES***

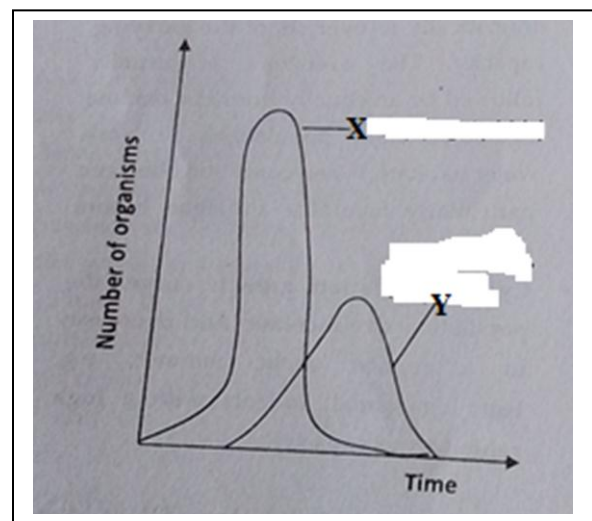
Answer Questions 1 in **section A** and **other 3 (Three)** other questions selecting on Question from each of the **Section B, C and D**

**SECTION A (20 MARKS)**

1. In a certain ecosystem (Farm), there is a change of number of birds in a period of time of 10 months and in the same ecosystem animals X were being affected by animal Y. which could feed on them above are represented on the **figure 2.3** and **figure 2.1**.



**Figure 2.1**



**Figure 2.3**

- a) i). Describe the variation of the curve in **figure 2.1** (02 marks)  
 ii) Explain the changes for the variation in **figure 2.1** above (04 marks)
- b) Identify the type of animal X and Y  
 Animal X (01 mark)  
 Animal Y (01 mark)
- c) Explain what would happen to animal X, if animal Y is removed from the Ecosystem (02 Marks)  
 ii) What are the differences between animal Y and parasite?
- d) Apart from predators, state other factors affecting animal production in Uganda today (02marks)

### **SECTION B (20 Marks)**

#### **CROP PRODUCTION**

2. a) What are the characteristics of an infertile soil?  
 b) Explain the factors that influence soil structural stability
3. a) Explain various considerations one should take when selecting good quality planting materials (05 Marks)  
 b) What are the problems affecting crop-production in Uganda (10 Marks)  
 c) State four ways of determining maturing crops for harvesting (05 Marks)

### **SECTION C (20 Marks)**

#### **ANIMAL PRODUCTION**

- 4 a) Explain how you would maintain a dairy farm free of ticks (08 marks)  
 b) Outline the procedure to follow in hand spraying of cattle during tick control (06marks)  
 C) Give reasons why farmers would prefer hand spraying their animals during tick control
5. a) What are the characteristics of beef cattle (05marks)  
 b) Briefly explain the factors affecting beef production in east Africa. (10 marks)  
 c) State the factors to consider when establishing a beef cattle herd (05 Marks)

## **SECTION D (20 Marks)**

### **OTHERS**

6.a) What is meant by the term gender gap in agricultural production (02 Marks)

b) Identify the role of women/ girls in agricultural (08Marks)

C) Explain how the government of Uganda can increase women's participation in agricultural production (10 marks)

7. A long legged bull after mating all the off-springs in  $F_1$  generation were long legged. After, offsprings in  $F_1$  were selfed and the results in  $F_2$ , were a mixture of long legged and short legged animals.

a) Why were offspring in  $F_1$  all legged animals? (02 Marks)

b) Show the genetic crossing of the above (8 Marks)

c) If in the farm there were 180 animals,

i) What was the total number of animals which were long legged? (03 Marks)

ii) Long legged than short animals. (03 Marks)

d) State the importance of cross breeding in a farm. (04 Marks)

**END**

**“HAVE BIG HOPE, PLANS IF YOUR TO SUCCEED”**