

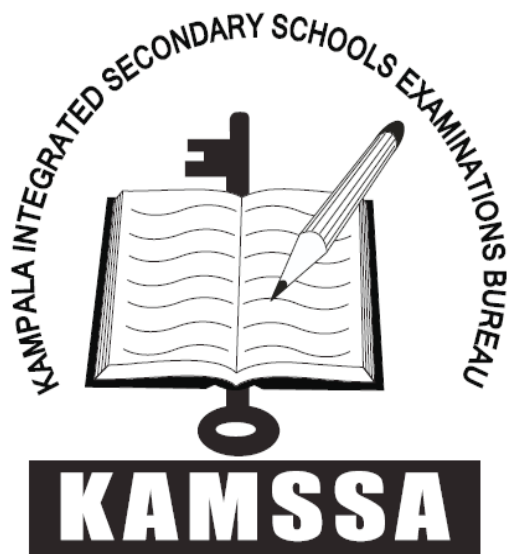
**P515/2**

**PRINCIPLES AND  
PRACTICES OF  
AGRICULTURE**

*Paper 2*

*July/August 2022*

*3 hours*



**KAMSSA JOINT MOCK EXAMINATIONS  
Uganda Advanced Certificate Of Education**

**PRINCIPLES AND PRACTICES OF AGRICULTURE**

**Paper 2**

**3 hours.**

**Instructions to candidates:**

- Answer *Question 1* in **SECTION A** and four other questions, selecting one question from each of the sections **B, C, D** and **E**.

## SECTION A

1. An investigation was made to determine the effect of carbon dioxide concentration in parts per million (ppm) and light intensity on the rate of photosynthesis of a plant in a green house. The investigation was done at two different light intensities: 0.05 and 0.25 arbitrary units of light intensity. A constant temperature of 22°C was maintained throughout. The results are indicated in the table below.

Rate of photosynthesis (mgdm <sup>-2</sup> h <sup>-1</sup> )		
Carbon dioxide concentration	At 0.05 units light intensity	At 0.25 units light intensity
300	12	25
500	14	30
700	15	35
900	15	37
1100	15	37
1300	12	31

- a) Using the same axes, represent the information in the table graphically (6marks)  
b) For the experiment at 0.25units light intensity, explain the effects of increasing carbon dioxide concentration on the rate of photosynthesis (5marks)  
c) Give two similarities and differences in the effect of changing carbon dioxide concentration on the rate of photosynthesis at the two light intensity (5marks)  
d) With illustrations, give the products of photosynthesis and how they are produced 4marks

## SECTION B

### CROP PRODUCTION

2. (a) Explain the different ways of the nutrients are lost from the soil. (14marks)  
(b) Give ways how organic matter affects soil fertility. (06marks)  
3. (a) Explain the factors that influence the spacing of different crops in the garden. (10marks)  
(b) Give the advantages of the following food practices. (10marks)  
i. Pruning ii. Staking

## SECTION C

### ANIMAL PRODUCTION

4. (a) Explain the major factors that lead to the be unfit for human consumption(14marks)  
(b) Outline the qualities of a good meat for home consumption (06marks)  
5. (a) Describe the life cycle of 2 host ticks (08marks)  
(b) Suggest the reason why should farmers have a good parasite and disease control program (12marks)

## SECTION D

### ECONOMICS

6. (a) Mr. Okello recorded the following data on 31<sup>st</sup>/Dec/2020. Use it to prepare his profit and loss account (12marks)  
opening valuation 400.000, pesticides 10,000 bought land 200,000, sold off layers 300.000, sold 2 cows each at 100.000, received cash of 50.000, milk sale 30.000, cost of harvesting maize 10.000, closing valuation 440.000, repair of tractor 80.000  
(b) Did Mr. Okello make a profit or a loss? Give reasons (02marks)  
(c) Why should farmers update their documents (06marks)  
7. (a) Explain the factors that influence the choice of an enterprise (14marks)  
(b) Outline the qualities of a good farm manager (06marks)

## SECTION E

### FARM MECHANIZATION

8. (a) Explain how can the farmer ensure prolonged lifespan of their buildings (14marks)  
(b) Outline the qualities of a good café pen (06marks)  
9. (a) Explain the factors that affect power output from draught animals (14marks)  
10.(b) How can you look after an oxen in order to increase its efficiency on the farm (06marks)