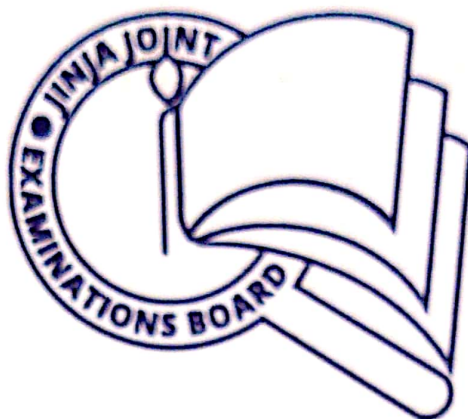


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PRINCIPLES AND
PRACTICES OF
AGRICULTURE
Paper 2
AUGUST, 2024
3 hours



JINJA JOINT EXAMINATIONS BOARD

Uganda Advanced Certificate of Education

MOCK EXAMINATIONS – AUGUST, 2024

PRINCIPLES AND PRACTICES OF AGRICULTURE

THEORY

Paper 2

3 hours

INSTRUCTIONS TO CANDIDATES:

Answer question 1 in section A and four other questions selecting at least one from each of the sections B, C, D and E.

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SECTION A: (20 MARKS)**Question 1 is compulsory**

1. The table shows quantity of grass eaten by two groups of cattle species feeding at different hours of the day on the farm

Time(hour)	Quantity of grass eaten(gm)	
	Species X	Species Y
6am	60	420
8am	90	380
10am	125	230
12pm	265	40
2pm	212	63
4pm	175	90
6pm	119	160

- Describe the trend of feeding in each cattle species. (4 marks)
- Identify each group of cattle represented by X and Y. Give reasons (4 marks)
- In which ways is animal species Y adapted to feed throughout compared to X? (4 marks)
- What is the effect of high temperature on farm cattle? (4 marks)
- Explain the factor that affect the quantity of feed eaten by cattle. (4 marks)

SECTION B (20 MARKS)**CROP PRODUCTION****Answer one question from this section.**

- (a) Give the importance of each of the following macro nutrients in plant nutrition.
 - Nitrogen** (5 marks)
 - Phosphorus** (6 marks)
 (b) Explain ways in which soil loses its fertility. (9 marks)
- (a) What is the meant by **herbicide selectivity**? (2 marks)
 - Explain the factors that contribute to selectivity of herbicides. (12 marks)
 - Give reasons why most farmer prefer chemical weed control. (6 marks)

SECTION C (20 MARKS)**ANIMAL PRODUCTION****Answer one question from this section.**

4. (a) What is meant by **fish sampling**? (2 marks)
 (b) Explain the factors that influence the stocking rate of fish in the fish pond (12 marks)
 (c) Suggest the control measures of fish predators in a fish pond. (6 marks)
5. (a) Why is piggery gaining popularity among Ugandan farmers? (8 marks)
 (b) Outline the management practices that should be carried out on piglet from farrowing to weaning. (12 marks)
6. (a) Describe the materials that are required for roofing farm structure. (5 marks)
 (b) Explain the factors considered when selecting timber material for roofing. (12 marks)
 (c) State the uses of roof on farm structure (3 marks)
7. (a) Describe the features of a good spray race (9 marks)
 (b) What are the advantages of a spray race in tick control? (6 marks)
 (c) How can a spray race be maintained? (5 marks)

SECTION E (20 MARKS)**AGRICULTURAL ECONOMICS****Answer one question from this section.**

8. (a) (i) What is meant by **opportunity cost** in farming? (2 marks)
 (iii) Give the effects of opportunity cost in agricultural production. (4 marks)
 (b) Suggest the ways of reducing risks in farming (9 marks)
 (c) Outline the benefits of diversification in farming. (5 marks)
9. (a) What is meant by **population explosion**? (2 marks)
 (b) Explain the causes of population explosion in Uganda today. (12 marks)
 (c) Suggest measures that can be put in place to mitigate population increase in your country. (6 marks)