

Name:

Index No.

Signature:

527/1

PRINCIPLES

AND

PRACTICES OF

AGRICULTURE

STANDARD HIGH SCHOOL ZZANA

Uganda Certificate of Education

Principles and Practices of Agriculture

(THEORY)

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

*This paper consists of part **A** and **B**. Attempt **all** questions in **Part A** and **four** questions from part **B** including atleast **one** question from each section.*

*For question **1**, write the letter corresponding to the **best** correct alternative in the box provided.*

*For questions **2** to **5**, write **all** answers in the spaces provided.*

| For Examiner's use only | | |
|--------------------------------|--------------|---------------------------------------|
| Part / Question | Marks | Examiner's No. & signature |
| Part A: | | |
| Part B: No. | | |
| No. | | |
| No. | | |
| No. | | |
| Total | | |

PART A: (20 marks)

*Answer **all** questions in this part.*

For question 1, write the letter corresponding to the best answer in the box provided.

*For questions 2 to 5, write **all** answers in the spaces provided*

1. (a) Which one of the following quickens rooting in cutting?
- A. Ethylene dibromide.
 - B. Indole acetic.
 - C. Phosphate fertilizer.
 - D. Auxins.
- (b) Which one of the following statements is correct about the camshaft?
- A. It is connected to the valves by connecting rod.
 - B. It revolves much faster than the crank shaft.
 - C. It controls the opening and closing of the valves.
 - D. It controls the movement of the pistons.
- (c) In animal nutrition, the biological value of protein is the proportion of protein;
- A. digested and absorbed in the body.
 - B. absorbed and retained in the body.
 - C. used for growth.
 - D. used as energy source.
- (d) The monetary value attached to the farmer's own labour and management is
- A. an explicit cost.
 - B. a variable cost.
 - C. an implicit cost.
 - D. a marginal cost.

(02 marks)

2. (a) Define the term specialisation. (01 mark)

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- (b) State **four** advantages of specialization in agricultural undertaking. (04 marks)

(i)

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(ii)

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(iii)

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(iv)

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3. Give **four** considerations to make in order to ensure high quality of produce during harvesting. (04 marks)

(i)

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(ii)

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(iii)

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(iv)

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4. Suggest **four** ways of maintaining clean water supply on the farm. (04 marks)

(i)

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(ii)

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(iii)

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(iv)

.....

5. (a) List **six** causes of low soil productivity. (03 marks)

(i)

(ii)

(iii)

(iv)

(v)

(vi)

(b) State **four** functions of progesterone hormone in farm animals. (02 marks)

(i)

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(ii)

.....

(iii)

.....

(iv)

.....

PART B: (80 marks)

*Answer **four** questions from this part, including at least **one** from each section.*

*Additional questions answered will **not** be marked.*

SECTION I

MECHANISATION AND FARM MANAGEMENT

6. (a) Discuss the measures that should be taken by Uganda government to stabilise the market price of agricultural commodity. (12 marks)
- (b) What problems would be encountered in implementing the measures you have discussed? (08 marks)
7. (a) What are the factors that affect the quantity of a commodity demanded for? (12 marks)
- (b) What is meant by “Elasticity of demand”? (02 marks)
- (c) Mr. Musoke bought 20kg of rice for his family members when the price was 1,000/= each kilogram. When the price rose to 1,500/= per kilogram he bought 15 kilograms. Calculate the elasticity of demand. (06 marks)
8. (a) What are the advantages and disadvantages of using animal power on farms? (08 marks)
- (b) Explain the factors to consider so as to obtain optimum output from animal power. (12 marks)

SECTION II

CROP PRODUCTION

9. (a) Explain factors that qualify a pasture species to be planted in a pasture land. (10 marks)
- (b) How can one improve the already established pasture? (10 marks)
10. (a) Explain the methods of applying fertilizers in the soil. (12 marks)
- (b) Suggest ways through which nutrients from the soil can be lost. (08 marks)
11. (a) Explain the cultural methods of controlling weeds. (12 marks)
- (b) Give reasons why frequent cultivation is not recommended in crop production. (08 marks)

SECTION III
ANIMAL PRODUCTION

12. (a) Give reasons why output of indigenous cattle in Uganda is low. (10 marks)
- (b) What would you advise the government to take in order to improve on the production of animals? (10 marks)
13. (a) Explain how ruminants and micro organisms in the rumen benefit from their symbiotic relationship. (10 marks)
- (b) Give the differences between the ruminants and non ruminants. (10 marks)
14. (a) Outline ways in which disease may spread in a poultry flock. (12 marks)
- (b) Describe the symptoms and control of Newcastle disease. (08 marks)

END

