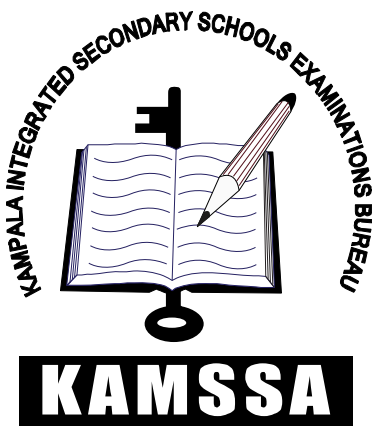


Name.....Stream



PRE-REGISTRATION EXAMINATIONS 2024

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 1

2 Hours 30 Minutes

INSTRUCTIONS TO CANDIDATES:

- This paper consists of **six** items in **two** sections **A** and **B**.
- Section **A** has **two** compulsory items.
- Section **B** has **two** parts **I** and **II**. Choose one item from each of the parts.
- All items carry equal marks.
- All answers must be written on the answer booklet provided.

SECTION A

CROP PRODUCTION

Item 1

On a district survey, the people of KOBOKO district were found with a challenge of low- and poor-quality harvests at the end of every season. This resulted due to hunger. The district agricultural officer held meetings in different regions in the district trying to interact with the farmers to establish the cause of the challenge so that he could find a solution for them.

Tasks:

- a)(i) Assuming you are the agricultural officer of your district and you find out that your farmers are facing the same challenge, establish the cause of the low- and poor-quality harvests being encountered. (4 scores)
- (ii) How best would you help these farmers to overcome the above causes of the challenge? (4 scores)
- b)(ii) When you allowed room for questions, farmer A requested you to help them on how to make a good crop rotation plan. Using beans, maize and cassava as examples, illustrate a four-year crop rotation plan on a three-plot piece of land. (10 scores)
- (ii) List down two major principles one must not leave out when designing a crop rotation plan. (2 scores)

Item 2

In the management of coffee as a beverage crop, there are very many activities a farmer gets involved in right away from planting time up to harvesting. Amongst these activities is pruning. Pruning is the removal of excess branches and leaves from the plant. The practice has to be done carefully to prevent damaging of the plant. Using the simple knowledge from the above theory and experience from the field, answer the tasks below.

- (i) Mention four reasons why you think pruning is necessary. (4 scores)
- (ii) Describe five coffee pruning stages carried out in the coffee garden. (10 scores)
- (iii) Discuss any other six management practices one has to carry out in the coffee garden after establishment. (6 scores)

SECTION B

ANIMAL PRODUCTION

Select one item only

Item 3

Just like human beings, animals need good housing facilities to shelter them during the night and protect them against the adverse climatic conditions like rainfall and sunshine. Different animals have different housing structures with different designs depending on the natural habits of the animal. Ben who is a cattle farmer would like to construct a house for his animals.

Tasks:

- (i) What are the considerations he must have in mind before starting the process? Explain at least six. (12 scores)
- (ii) Describe the qualities one looks at to rank an animal house as a suitable one. (8 scores)

Item 4.

On the 25th of February 2024, Mr Kato who is an animal farmer visited his animals on the farm and discovered that their bodies had been covered by other living organisms most especially the ears. As he tried to collect their droppings, he also observed some moving organisms with in. He visited a veterinary doctor to whom he explained the signs and symptoms his animals show and the other living organisms on their body. He was given the drugs and acaricides which properly prescribed. Being a student who studies agriculture, complete the following tasks.

Tasks:

- (i) Why do you think Mr Kato chose to eliminate those living organisms on the animal's body. (8 scores)
- (ii) What general term do we give the living organisms;
 - a) That were observed on the animals' body, give an example. (1 score)
 - b) That were observed in the animals' droppings, give an example. (1 score)

PART II

SOIL SCIENCE AND MANAGEMENT

Item 5

Soil as the top most layer of the earth's surface is one of the most important aspects in carrying out agricultural activities. However, if not well cared for, its output tends to reduce or else total failure is encountered. Some farmers use artificial fertilisers like area the moment they begin to witness the reduction in production. Before the introduction of these artificial fertilisers which have done more harm than good, our grandfathers used the cultural measures to ensure the fertility of the soil.

Tasks:

- (i) Explain some of these cultural measures that were used to conserve the soil. (4 scores)
- (ii) How best can the farmers be convinced to take on the cultural methods of soil conservation. (6 scores)

Item 6

Farmer **X** wants to start an agricultural project among cattle production, poultry, crop production, rabbitry, Bee keeping but he is confused on which one he should take. He has the startup capital of two million Ugandan shillings and he has approached you as a student who offers agriculture for guidance.

Tasks

- a)(i) Which advise would him take on? (1 score)
- (ii) Help him to draft the budget he will use for him to run the project. (8 scores)
- (iii) Mention other projects related to the one you have advised him to take on that can add value to the farm in case he gets more capital and wants to diversify the project. Give four projects stating the relationship of each. (8 scores)
- b) Discuss with him/her the importance of the project you have chosen for him. (3 scores)

END