

527/1
AGRICULTURE
PAPER I
April | May 2024
2½ Hours

MID TERM KABAILE DIOCESAN CYCLE ASSESSMENT

UGANDA CERTIFICATE OF EDUCATION

AGRICULTURE

PAPER I

Theory

2 Hours 30 Minutes

INSTRUCTIONS TO CANDIDATES

- This paper consists of six examination items.
- It has two sections; A and B.
- Section A has *two* compulsory items.
- Section B has *two* Parts; I and II. Answer one item from each section.
- Answer *four* examination items in all.
- Any additional item(s) answered will not be scored.
- All answers must be written in the answer booklet(s) provided.

**SECTION A:
SOIL SCIENCE AND VALUE ADDITION:**
Answer all items in this section.

Item 1:

Mbonera a farmer in Rweruhandaga Kahungye sub-county. He owns land on the slope of a hill in Kahungye sub-county. He grows crops such as beans, peas, maize, Millet, Irish potatoes also he has few cows.

Kahungye sub-county receives two serious seasons of rainfall, March, April, May and September, October, November. During rainy season crops are washed down the hill which leads to poor yields of crops. The soils in the sub-county no longer support crop and animal grazing.

Task:

Based on the above scenario suggest improvements the farmer should do to ensure high crop and animal yields in their sub-county.

Item 2:

Banana and cassava are grown on large scale in Ntungamo district, farmers enjoy large scale production by having enough food at some season when the crops are ready for harvesting.

Farmers sell their produce to nearby markets at low prices. During this period parents are able to pay fees. However in other seasons farmers when crops are not yet ready they lack what to eat and fees payment for their children is very poor.

Task:

Write a message to farmers in Ntungamo advising them on how they can overcome food shortage during off harvest periods.

SECTION B:

This section has two Parts I and II

PART I: ANIMAL PRODUCTION

Answer one item from this section

Item 3:

James is a poultry farmer producing eggs on large scale and selling offlayers at the end of laying season of birds. He was advised by an agricultural extension officer to feed birds on balanced diet for good quality eggs. Birds at times would lay soft shelled eggs when he would change the supplier of feeds. He would collect cracked, dirty eggs from the deep litter house also he would at times find dead birds in the house

Task:

Basing on James's condition of poultry farm. Write guidelines to help him improve on his farm conditions.

Item 4:

There are different breeds of cattle reared in Uganda. Two farmers A and B in Mbarara district had an equal size of land in the same location but kept different breeds. Students from a certain school visited the two farmers and discovered that cattle from farmer A's farm were; small in size took long to mature and produce less milk while from farmer B his cattle were big in size quick maturing and produced a lot of milk.

Task:

- (a) Suggest possible reasons why farmer A would be less efficient in production.
- (b) How can farmer A improve his animal breeds.

PART II: CROP PRODUCTIO

Answer one item from this part.

Item 5:

Mr. Karibata is a farmer who grows Irish potatoes on one hectare of land. He obtained the seeds from the market some of the seeds had pilled off skin, and others cut. He planted in a prepared seed bed and after three weeks some plants sprouted but others did not, weeds choked up the plants and the plants' leaves appeared as if they were boiled. Mr. Karibata managed to weed once and sprayed once and after 60 days he decided to harvest the tuber. Most of them were very small and others rotten as a result he harvested 1 bag instead of 12 expected bags of potatoes.

Task:

- (a) Write a message to Mr. Karibata advising him on how he could obtain the expected yield.
- (b) How could Mr. Karibata overcome the rotting of tubers and poor vegetative growth

Item 6:

Janet is a good crop farmer, she tries to maintain fertility of her land for high yields. In one season she prepared a seed bed for maize seeds 2(two) weeks after seed bed preparation she planted maize seeds, after rains she observed after 7 days; seedlings had not emerged out of the soil. Janet did not know why seedlings failed to emerge but a friend told her that seeds were dormant.

Task:

- (a) Apart from dormancy; Give Janet possible explanation as to why maize plants had not emerged
- (b) Advise Janet how the germination of the seeds could be improved.

End