

Candidate's Name.....

Signature.....

527/1

AGRICULTURE

Paper 1

2024

2 hrs:30mins



SHAPTA JOINT ASSESSMENT BOARD 2024

Uganda Certificate of Education

AGRICULTURE

Paper 1

2HOURS: 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 part.
- Answer **four** examination items in all.

SOIL SCIENCE AND VALUE ADDITION

Item 1.

TASK



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TASK



Item 2.

As a result of the increased demand of vegetables in your community, you decided to venture into vegetable growing. However, some areas of your community are rocky with shallow soils while other areas are gently sloping with deep, well drained and fairly fertile soil. Due to those differences, the seedlings that were raised in the nursery came out bent, small sized and some were diseased. This led to poor quality and low yields realized by these learners.

TASK

Suggest the improvements you should do to ensure profitable vegetable production.



SECTION B

This section has **two** parts; I and II

PART I: ANIMAL PRODUCTION

Answer **one** item from this part.

Item 3.

Mr. Kagoda is a poultry farmer producing both eggs and meat on a large scale. Recently he got a new farm manager and instructed him to establish a poultry breeding unit using the parent stock he has to produce chicks for sale. However, the farm manager was not getting the expected number of chicks from the hatchery. The farm is located in an area with many other poultry farmers and there is free movement of chicken from one farm to another. Birds from the neighboring farms were observed with cough, blood-stained faeces, mucus discharge and scratch marks on their bodies. Operation Wealth Creation has provided tools and equipment to livestock farmers in the community especially for disease and parasite management.

TASK

Write guidelines to help the farm manager meet Mr. Kagoda's requirement.

Item 4.

Bizimana, an agricultural extension officer from Kabanyolo Agricultural Research Institute visited Karungi's farm and in his report, he indicated that the roof of a calf pen was blown off and the walls were full height. Also, the cows were bonny and their dung contained worms. The adult animals could hardly find what to eat and were grazing on woody natural pastures. The only source of water had snail shells, algae and dung. The lactating cows had cracks on their teats. Hair-like substances were seen in the milk which was filtered using an old cloth. The farm owner uses a basin for mixing the acaricide.

TASK

Basing on the report from Mr. Bizimana, how can the farm owner improve on the productivity of his livestock farm?

PART II: CROP PRODUCTION

Answer **one** item from this part.

Item 5.

The maize farmers in Uganda experienced low yields in 2021. This was generally attributed to the changing weather patterns, the up surge of pests and disease attacks, the poor-quality seed used, poor soils and the poor post-harvest handling methods employed. The demand for the grains became eminent and this translated into increase in the price to shs. 2,000/= per kg from shs. 1200/= per kg in various markets of Arua City. Trucks bearing labels of different schools were seen packing at various market lanes as the loaders kept filling the trucks with sacks of maize grains and posho. The high prices of maize at this time caused a lot of pain to the farmers whose yields had been lowered in the previous season and they were discouraged from venturing into maize growing ever again. In addition, farmers who had plenty of maize in stores, started witnessing changes in color of the grains; bad smell through rotting as a result of attack by bacteria and fungi.

TASK

You are the quality assurance officer in Arua City. Write a newsletter that will benefit the farmers and improve on the maize production in Arua City.

Item 6.

A vegetable farmer decided to grow a hectare of tomatoes. He set up a nursery bed in a free draining area near a water source. After preparing the nursery, he broadcast the seeds, covered them well with soil and watered the bed. The seeds germinated well and seedlings covered the entire soil surface. He maintained all the seedlings up to the time of transplanting. Transplanting began at twelve noon on a sunny day as the farmer had to attend a meeting at 2.00 pm the same day. After a week, some empty spaces were noticed within the crop rows. The plants which survived had many branches and leaves. When the farmer inspected his garden before the crops reached maturity, he observed dark brown patches on the leaves and stems. Dark brown circular spots were also covering large parts of the

fruits. At a later stage, holes were also observed on some bigger fruits. At harvest, farm workers picked the fully ripe red fruits, packed and sealed them in plastic bags. The packed fruits were to be delivered to the market in a week's times.

TASK

Write a message to the vegetable farmer advising him on how he should carry out tomato production efficiently.



END