

Name:.....

Signature:..... School:.....

527/1
AGRICULTURE
Paper 1
Jun / Jul. 2024
2½ hours



MEPSA RESOURCEFUL ASSESSMENT 2024

Uganda Certificate of Education

AGRICULTURE

Paper 1

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 part. 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.

Turn Over

SECTION A
SOIL SCIENCE AND VALUE ADDITION

Answer **all** items in this section

Item 1 (a)

The Igumba Young Farmers Club in Lugoloire County has mobilized youth to engage in agriculture by growing crops and rearing dairy cattle. The young farmers produce a large quantity of milk, oranges, tomatoes, and maize, which they sell in raw form to middlemen around the country. Recently, they have realized that they are not earning enough money due to losses from fruits rotting and milk spoiling while waiting for buyers. Additionally, prices have dropped due to over production. Frustrated, the farmers are now considering leaving farming because of these issues.

Task

As an agronomist, write a message to the farmers group advising them on how to overcome their problems.

(b)

Agriculture is considered as a business that can earn livelihood to many engaged in it. On moving to one region of Uganda, I observed farmers selling farm produce directly from garden and keeping their money in vessels at home, with no written information on any activity. Buying inputs on retail shops in small quantities. Using own labour during work all the time, bargaining for prices of their products with middle men as individuals, keeping farm produce under tree sheds for long hours and borrowing money from unlicensed individuals in village that has high interest that farmers cannot afford.

Task

Basing on the above scenario, what advice would you give to the above farmers in that area?

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Item 2

The Mukanza family of Ivundhu village has been farming on their 20 – acre land, which spans two adjacent hills with a valley in between. For the past two decades, farming has been highly profitable for them. Recently, however, crop yields have been declining due to soil exhaustion and severe erosion on the two hills. As a result, they are now being forced to move to the valley, which has poorly drained soils and frequently floods after collecting water and soil runoff from the hills.

Task

As a specialist in soil, suggest improvements that the Mukanza family should implement to ensure that their entire land becomes productive.

SECTION B

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

PART I: ANIMAL PRODUCTION

Answer **one** item from this part.

Item 3

Kalunji Dairy Farm, once the pride of Bugodhe Parish, provided employment to many youth and brought social services to the neighborhood. After the death of the capable farm manager, Mr. Munhu, due to COVID-19, Sekolito took over management in 2022. To increase profits, Sekolito made several changes: he reduced the workforce in the calf pens, decreased the frequency of animal dipping from twice a week to twice a month, converted some grazing paddocks to sugar cane fields, limited de-worming to once a year, weeded paddocks twice a year, vaccinated only half the animals, grazed all cattle in one group, stopped buying ear tags, reduced minerals for lactating animals, and allowed animals to keep their horns. After one year, farm production has declined.

Task

As a student of agriculture, write and explain why the management under Sekolito may need changing.

Item 4

Mudingo has always been interested in raising layers using the deep litter system. He applied for funds from the Parish Development Model to start his business. After receiving the money, he ordered day – old chicks from a nearby government stock farm, with the birds set to arrive in two weeks. However, Mudingo has no experience in caring for chicks from day – old to five weeks of old age. He plans to raise the birds in his garage until they are four weeks old.

Task

As a poultry student, write a message suggesting how Mudingo can overcome his challenges.

PART II: CROP PRODCUTION

*Answer **one** item from this part.*

Item 5

Most maize farmers in Kasorwe village are not benefiting from growing the crop and are switching to sugar cane. Upon assessing the situation, it was observed that many gardens had stunted crops with yellow leaves, and half of the gardens showed crop leaves and stems with holes indicating pest damage.

Farmers who harvested crops stored the fresh cobs under tree sheds, dried the shelled maize grains on bare ground, and kept the dry seeds for planting in gourds and old tins. Some farmers ground the grains on stones to make posho for food, and those wishing to sell dry grains struggled to find a market.

Task

As an agribusiness student, advise the farmers in Kasorwe village on how to produce maize for maximum profits.

Item 6

In a traditional Ugandan tribe, it is commonly believed that cassava can thrive in any environment. Mr. Nkubba decided to grow cassava and prepared his 10 - acre uncultivated land by making holes one foot deep, spaced 100m x 100m apart. He requested cuttings from his neighbour's 3 months old cassava plants, which he cut to 10cm length and removed the buds. He planted one cutting per hole, fully covering them with soil just before the seasonal rains. Nkubba hired one casual laborer to weed the garden after the rains began. The few plants that sprouted showed curled, muffled leaves and stunted growth. At harvest, he obtained only 1000kg of small tubers from the entire land.

Task

As an agronomist specializing in cassava production, guide Mr. Nkubba on how to make his cassava farming profitable.

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