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AGRICULTURE

PAPER 1

JULY/AUGUST 2024

2 ½ HOURS



**ASSHU – KASESE JOINT EXAMINATIONS BOARD (AKJEB)**

**MOCK EXAMINATIONS**

**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** section **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 provided.*

**SECTION A**  
**SOIL SCIENCE AND VALUE ADDITION**

*Answer **all** items in this section.*

**Item 1**

In Kasese municipality, a new meat processing plant has been started. It processes various meat products which it supplies in and outside the municipality. The factory is surrounded by many people. Workers are always working in plain clothes that are tainted with blood, they also work bare footed.

The factory produces a lot of heat, makes a lot of noise and sometimes short circuiting due to poor wiring. The community around the factory has started to complain of the contaminated water source with blood, pieces of meat, and intestinal contents.

**Task**

As a newly appointed health inspector of this municipality, write an advisory letter to factory administration on how to overcome the above challenges.

**Item 2**

Mr. Edson is a farmer in Kisinga. He has his 2 acres of land that he is using for farming, the land has been fertile and he has been harvesting highly from this land. He has always had enough food for his farming consumption and enough food for sale.

Of recent, his crop yields have drastically reduced, crops have started to develop yellow leaves, stunted growth, shallow roots, chlorosis, leaves fall off the plants prematurely.

Mr Edson is confused; he does not know what is happening to his garden.

**Task 1**

As a student of agriculture, write a message to Edson explaining what is happening to his garden.

**Task 2**

Write a message advising Edson on what to do.

*This section has two parts: I and II*

### **PART I: ANIMAL PRODUCTION**

*Answer one item from this part*

#### **Item 3**

- (a) A dairy farmer would like to make a ration of 16 % C.P using maize brand that contains 11 % C.P and soya bean meal containing 40 % C.P. the two feeds are to be mixed to make 1 tonne of the ration. But the farmer has failed.

#### **Task**

As an agriculture student who has had knowledge on feed mixing . help this farmer by writing the procedures and come up with the required mixture.

- (b) Mr. Asiimwe is a dairy farmer keeping animal under zero grazing. He plants fodder for feeding his animals, but he does not know how to prepare roughages before giving it to animals. This makes it un palatable to animals and low digestibility and productivity. Sometimes fodder is harvested when too young. This causes digestive problems like bloat.

#### **Task**

You are an extension worker in Mr. Asimwe's area, write the guideline you will use to train Mr. Asimwe in order to avoid the challenges mentioned above.

#### **Item 4**

Poultry rearing is gaining popularity in Uganda. Poultry provide white meat and eggs which are highly demanded on the local and international market, this makes it a profitable venture worthy investing in

Farmers that invest in poultry usually find challenges with chicks within the first 4 weeks after hatching (Before chicks developing feathers). At this stage mortality is high leading to losses by the farmers. Extension workers say this stage is not difficult as long as the farmers knows what to do right.

#### **Task**

As an extension worker in Uganda. Write the guidelines you will use to train farmers on how to manage chicks at the stage mentioned in the scenario in item 4 above.



## PART II CROP PRODUCTION

*Answer one item from this part*

### Item 5

Mr. Moses is a maize farmer in Hoima. He joined this business in 2010 with crops of having his life changed for the better from the income he will be farming from maize growing. This has not been realized due to inadequate knowledge in the way he handles planting materials

Mr. Moses reserves planting materials from the previous season which is usually local varieties. He does not consider size, colour, parent plant, pest damage and any other physical damages. At planting very few of them germinate leading to heavy losses. Moses has thought of leaving the business.

#### Task

Based on the above scenario, write a message to Mr. Moses advising him on what to do.

### Item 6

Having realized that tomatoes are highly demanded, Mr. Amos decided to grow tomatoes. He went and cultivated one acre of land to plant tomatoes. The following week he went and bought tomato seedlings very early morning and he started planting. He did not know the variety he was planting and its spacing.

By evening some seedlings had started to wilt but he did not think of gap filling.

Those seedlings that germinated developed many branches and leaves. The leaves and stems started to develop dark brown patches which later appeared on fruits too. Fruits were bored with holes. Mr. Amos started to apply pesticide but it was too late. At harvest time, ripe fruits were picked and put in polythene bag to be delivered to the market in a week's time. At the end of it all, the farmer made losses.

#### Task.

As a student of agriculture, write a message to Mr. Amos advising him on how better he should have handled his project.

**END**