

NAME..... STREAM.....

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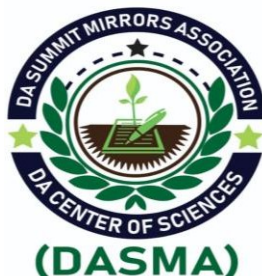
AGRICULTURE

Paper 1

S.4

Feb/Mar 2025

2 ½ hours



UGANDA CERTIFICATE OF EDUCATION

AGRICULTURE SET ONE 2025

SENIOR FOUR.

Paper 1 (theory)

2 hours 30 minutes

**INSTRUCTIONS TO CANDIDATES:**

*This paper consists of 6 items 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.*

*Indicate items attempted in Section B (Part I & Part II)*

*All answers must be written in the Answer sheets provided.*

For Examiners' Use Only	
Item.	Scores.
1	
2	

<b>SECTION B</b>	<b>Part I</b>		
	<b>Part II</b>		
<b>TOTAL SCORES</b>			

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

*Answer both items in this section.*

***Item 1.***

Matovu harvested 1 tonne of tomatoes. He transported them to his home using a truck that had carried animal dung and stored them in open plastic containers. He decided to sell his tomatoes to people in nearby communities. He was able to sell 20 kilograms in three days at a price of Ugx 500 Shs per Kilogram to his immediate neighbours. In the next village, Kato owns a community radio that broadcast all over the subcounty.

While selling tomatoes, he measures them using hands and packs them tightly in black polythene bags to prevent spoilage. The following week, tomatoes started becoming soft and changed colour to brown which prompted customers to start buying tomatoes at very low prices. He tends to quarrel with customers who are inquisitive about his business.

**Task.**

Advise Matovu on how he can overcome his challenges so as to get more profit from his business.

***Item 2.***

Mukula purchased two acres of gently sloping land for growing NEIRO sorghum variety that prefers slightly alkaline conditions. The upper part of his land possesses some simple gully like depressions. The left part of his land dries out very fast while soils on the right side are brown in colour and have a very hard surface. The lower part of his land is occupied with little stagnant water. He planted sorghum seeds and plants emerged with purple leaves which left him wondering. An expert who conducted research in their community indicated that their land has pH of 2.5. These resulted into poor harvest.

Mukula plans to grow the same crop the following season.

**Task.**

Advise Mukula on what should be done on his land to solve challenges he faced so that he can improve on sorghum production.

## SECTION B

*This section has two parts; I and II*

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

*Answer only one item from this part.*

#### ***Item 3.***

Bright established a goat rearing project mainly for meat production. He purchased 100 goats belonging to Mubende breed. The goats are housed in a structure with a muddy floor and walls entirely made out of iron sheets. Kids are fed using young grass pastures and clean drinking water from the age of one week. On his farm, there is a plenty of elephant grass growing however the area experiences a dry spell during the month of July which brings up pasture shortage.

Mating occurs randomly among goats on a daily basis. Some animals were observed with high fever and extreme coughing while some females were observed mounting others with mucus discharge around their vulva which he suspects to be caused by organisms in their dung. Slaughtering of mature goats is done using a blunt knife under a tree next to his home.

#### **Task.**

Advise Mr. Bright on how he can overcome his challenge to get more profits from his goat rearing project.

#### ***Item 4.***

A farmer started up a poultry rearing project aimed at egg production. He obtained local chicks from one of the neighbors and placed them in a kitchen which they shared with two goats. Upon arrival, chicks were fed on plain water and clean food remains from the kitchen. A burning piece of wood was placed in the room to provide both light and heat.

After 3 weeks, the few birds that were still alive were transferred to another room. They exhibited nasal discharge, blood stained droppings and flopping feather which left him puzzled. He gave them traditional herbs to restore their condition. The few birds that were left started laying at the age of 7 months. Eggs were laid on the ground though some were eaten by birds.

#### **Task.**

Advise the farmer on how he can handle his project to get the best out of it.

## **PART II: CROP PRODUCTION**

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

### **Item 5.**

Makona established a mango growing project for export market. He obtained seedlings under a mango tree that were growing on their own. He cleared his land using a panga and immediately dug the planting holes. The seedlings were planted following a spacing of 0.5m by 0.5m. The few plants that established showed dead growing tips and scotched margins on their leaves. Whenever, he moved close to mango plants some organisms would be observed flying allover the place.

Some plants were observed with numerous branches and immature fruits scattered all over the ground. Upon maturity, mango fruits that were very soft with dark brown patches were harvested using stones followed by packing in black polythene bags for safe transportation to home. All in all, Makona failed to meet his target.

### **Task.**

Advise Makona on how he can handle his mango growing project in order to meet his target.

### **Item 6.**

Musa established a bean growing project. He selected seeds for planting from what he harvested the previous season. Some seeds were small in size while others had wrinkled surfaces but bigger in size. He cultivated his land once using a tractor and dug planting holes of depth equivalent to 30cm following a spacing of 3cm by 3cm. He sowed four seeds in each planting hole.

After two weeks, the few plants that established and germinated exhibited yellowish leaves. Some bean plants were observed with dark sunken lesions on leaves/pods and simple holes on their stems. Upon maturity, he harvested beans after extreme dryness with some bean seeds scattered all over the garden. All in all, he had a poor season. He is willing to try again next season.

### **Task.**

Advise him on how he can deal with the situation above to get the best results the following season.

**END**

**"Have a fruitful term, may God protect you"**