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AGRICULTURE

Paper 1

July – August

2024

2 ½ Hours



UGANDA MUSLIM TEACHERS' ASSOCIATION

UMTA JOINT MOCK EXAMINATIONS- 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 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) attempted will not be scored.

FOR EXAMINERS USE ONLY				
SECTION	PART	ITEM	SCORES	EXAMINERS SIGN
A		I		
		2		
B	I			
	II			
TOTAL SCORE				

SECTION A

SOIL SCIENCE AND VALUE ADDITION

Answer all items in this section.

Item 1.

(a) Farmers in Bunamukye village in Tororo district grow crops like maize, millet, beans, sweet potatoes for home consumption and the surplus for sale.

After a long time of cultivation of the crops on the pieces of land, the yields were very low despite the fact that the area receives enough rainfall.

Task:

Guide the farmers on how to improve productivity of the soils.

(b) Obbo a farmer in Bunamukye village uses crop residues for feeding farm animals to supplement on the normal grazing.

The other crop remains after harvest are burnt to ashes which are later deposited in a pit.

The extension worker in charge of village advised Obbo to convert the remaining residues into materials which he can use to improve the productivity of his soils.

Task

Write a message to Obbo advising him on how to convert the residues into useful materials.

Item 2.

Due to the great demand for vegetables in Kasasa Secondary School, the Senior four students of Agriculture started a vegetable garden on the school farm. They carried out a survey on soil sampling and came up with the following findings. Soils from areas that were gently sloping were well drained with fair amount of plant nutrients. Soils from areas that were steep and rocky had shallow soils with less plant nutrients. During the nursery bed preparation, the soil was compacted and flooded with water. The soil was also sticky and its pH lower than the recommended. Seedlings on the bed were etiolated.

Task

As a crop production specialist, Suggest the improvements that the students should do to ensure a profitable vegetable production on the school farm.

SECTION B

This section has two parts; I and II

Part I: Animal Production

Answer one item from this part

Item 3.

John a poultry farmer rears layers and broilers. He employs several workers in various sections of the farm and pays them according to working hours. Eggs are collected per day and kept in boxes in the store. They are counted at the end of a week. Some buyers of the eggs and birds pay cash while others take on credit. Some workers complain of under payment and others no payments. However, others were happy about surprise increments in payments. John and his workers could not exactly tell the debts of the farm and dates for various management practices, hours worked for and productions from the section of the farm. This was because of poor memories to recall and useful information written on pieces of papers that would get lost.

Task

If John employs you as a farm manager, suggest how the problems on the farm could be minimized detailing the types of information to keep.

Item 4.

Juma is the district veterinary officer who decided to visit and inspect a dairy farm in the district.

He noted the following;

The milk had blood stains and some hairs that were sieved using a piece of mosquito nets
Milking was done in big sauce pans that attracted many flies.

Milk was stored and transported in jerrycans without lids.

Near the parlour was a garden of onion plants

The floor of the parlour was dirty and dusty,

The cows all appeared bonny, dirty, with long loose hairs.

Their teats had cracks and some sores.

Task:

Guide the farm manager on how to produce clean and safe products on his farm.

Part II: Crop Production
Answer one item from this part.

Item 5.

Cereal crop growing is now done worldwide. In Uganda, maize is commonly grown in many parts of the country and has become a staple food.

Mr. Ssemutenga has one hectare of land allocated for maize growing. The seeds for planting were from the previous harvest which had holes, some broken and some with dark stained embryos.

During land clearance, the bush was set on fire.

He used a forked Jembe to dig the piece of land and the planting holes.

The planting holes were spaced at **1m x 1m**. Unfortunately, some of the seeds did not germinate.

Weeds grew very fast out competing the maize plants that became stunted with yellow leaves.

Weeding was done once after two months and harvesting after four months by **uprooting** the whole plants.

The cobs were noted to be very small and some cobs did not have seeds making the total yield far less than was expected.

Task

Advise Mr. Ssemutenga on how he can obtain the expected yield from his farm.

Item 6.

Mjomba is a vegetable farmer specializing in the growing of cabbages on his two hectares of land. He selected a site for a nursery bed near a pond with well drained soils.

The nursery bed was prepared well, seeds sown and covered lightly well. Watering was carried and the seeds germinated well, grew and covered the nursery bed.

The seedlings were left to grow till the time of transplanting.

Due to shortage of labour Mjomba decided to transplant his seedling whole day till evening.

Some seedlings dried and failed to take off. Those that survived seemed not to be healthy with many leaves and heads rotting.

During harvest, the cabbage was picked and packed in polythene bags ready to be taken to market.

Unfortunately, transport was a problem for a full week.

Task:

Advise Mjomba on how to correctly produce the vegetable he specialized in.

END