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AGRICULTURE
Paper 1
2024
2½ hours



WAKISO – KAMPALA TEACHERS' ASSOCIATION (WAKATA) WAKATA PRE-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 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.

SECTION A

SOIL SCIENCE AND VALUE ADDITION

Answer all items in this section.

Item 1.

Mpindi is a crop grower in Mukono district. Before he plants any crop in the garden he picks some soil samples, takes it to laboratory for various tests to be done.

Task:

- (a) Identify any **four** tests that Mpindi does on the picked soil samples.
- (b) In one of the tests done Mpindi picked the soil sample; placed it in the boiling tube, added Barium sulphate, followed by distilled water and 4mls of universal indicator solution. He left the contents to settle for about 45 minutes. After 45 minutes a clear yellow was seen in the middle of the content in the boiling tube.
 - (i) From the above procedure what soil condition was Mpindi testing.
 - (ii) Why did Mpindi add barium sulphate in the test?
 - (iii) Given any **three** reasons why it is necessary for Samuel to carry out the test in (b) before any crop growing.

Item 2.

Auma of S.4 Agriculture class went in her garden at school and dug out some soil samples. The soil samples were collected, spread on a big sheet of paper to be examined.

Task:

Identify the components which Auma could have observed and state the importance of each in farming. Also suggest ways how you can increase the abundance of each of the observed component.

SECTION B

This section has two parts; I and II

PART I: ANIMAL PRODUCTION

Answer one item from this part.

Item 3.

Mula is a livestock farmer in Busede Sub County in Jinja district. He specialises in cattle rearing. He keeps two types of cattle that is type $\bf A$ and type $\bf B$ each of which has some of the following characteristics as shown in the table below.

Type of cattle	Characteristics
A	♣ Block shape
	♣ Thick muscles
	≠ 90% carcase weight.
	♣ Fast growth rate
	♣ Produces 8kg of milk per day.
В	Triple wedged.
	■ 20% carcase weight
	• Fast growth rate.
	 Produces 25kg of milk per day.

Task:

Basing on the data given in the table classify the types of into two groups basing on their purpose. Give reasons in each case to support your classification. Also discuss the potential challenges and benefits Mula might face in rearing type $\bf A$ and type $\bf B$ cattle in his farming operation.

Item 4.

A group of agriculture students had a visit to poultry farm at Kikuube village. While on the farm it was observed that the farmer specialised in layer production and production of breeding stocks. On the farm many workers were seen involved in many activities.

Task:

Identify the likely activities workers were involved in and give reasons for carrying out each activity. Also state the tools/materials that are used in any activities identified giving the use of each.

PART II: CROP PRODCUTION

Answer one item from this part.

Item 5.

S.4 Agriculture students of a certain school visited a bean grower at Kabimbiri village who gave them a guided tour around his bean garden. On touring the garden it was observed that of many planted bean seeds a few of them had properly germinated yet the farmer had provided the seeds with all conditions required for germination.

Task:

Write a message to the bean farmer advising him on how he should carry out bean germination efficiently.

Item 6.

Mr. Odongo is a cereal crop grower in Lira district. He grows a variety of cereal crops and in their growing or production a number of practices are carried out. For these cereals to grow well Mr. Odongo has to take into consideration of the best growth requirements.

Task:

Compose a message to Mr. Odongo providing advice on suitable cereal crops for his farm, outlining considerations for optimal growth, and suggesting management practices to implement during the growing period for these cereals.

4 END