

553/1
BIOLOGY
(Theory)
PAPER 1

November 2023
2½ hours



WAKISSHA JOINT EXAMINATIONS

End of Year Assessment

SENIOR THREE

BIOLOGY

(THEORY)

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO LEARNERS:

- *This paper consists of five items.*
- *All items carry equal scores.*
- *Attempt all items.*
- *Write your responses in the booklet provided.*

1. Kiremya's family lives in Katanga slum, a suburb of Kampala city. Near his home there are old pit latrines, a pond and a heap of delaying garbage deposited by the neighbors and his family. From time to time his children fall sick and some have died of different diseases. Kiremya is accusing one of his neighbors of causing the sickness and death of his children.

Task

Imagine you are a counselor, write a sensitization message to Kiremya's family to enable them live in peace with the neighbors.

(20 scores)

2. Soil is an important economic resource in our society especially if used rightly. Some of the people in society are farmers and so use it for growing crops, others are builders and use it for plastering houses, while others are potters and use it in ceramics to make stoves and pots.

However, all those persons lack the knowledge of physical and chemical properties of soil and consequently the farmers get poor harvests, the plaster done by builders gets loose and fall off, while the potters their products last for a short time. All categories of these people have noted a decline in their market for the products and their business are almost collapsing.

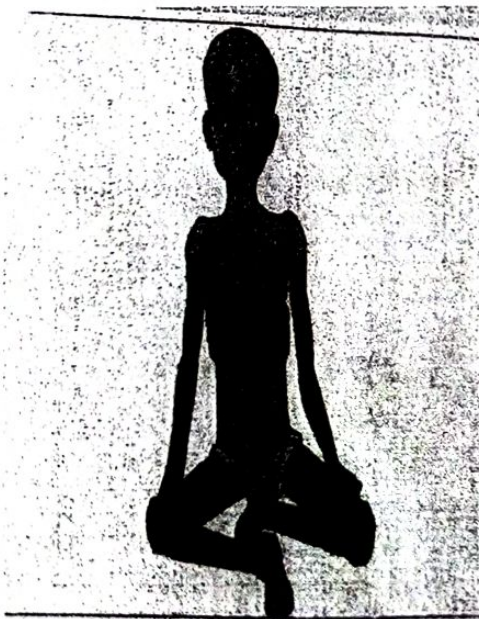
Task

As a soil scientist and extension worker prepare a write up for each category of people to save their business and benefit from their activities.

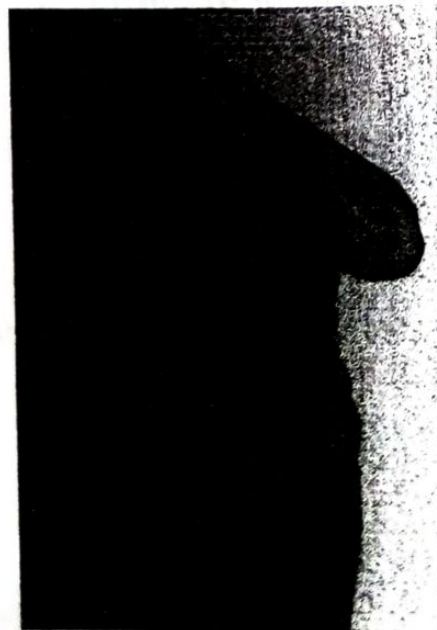
(20 scores)

3. People have different body weight and some are said to be thin and others obesity. Being thin or obesity in itself maybe an indication of poor nutrition or health. The person A and B in the pictures below have nutritional problems and live in your community.

A



B



Task

As a public health officer in the same community, write a sensitization message to each of them explaining how each can improve on his diet to become healthier.

(20 scores)

4. Sarah a 50-year-old woman has been experiencing dental issues of late. She often neglects her oral hygiene, rarely brushes her teeth and frequently consumes sugary snacks. As a result, she develops tooth decay and gum disease. In addition, Sarah has difficulty in digestion of certain foods due to insufficient enzyme activity.

Task

Explain the effects and how Sarah's poor oral hygiene and dental problems affect the digestion of food and also affect the assimilation of the end products of digestion.

(20 scores)

Bruno Fernandes is a footballer of Manchester United football club. One day he fell and shortly could not stretch and move his arm freely but had no fracture diagnosed. He was taken to a physiotherapist who attended to him and got better with no medicine administered.

Task

Imagine you are the physiotherapist prepare a write up to explain what caused his arm failure and how you would work as a physiotherapist to enable him to stretch and move his arm freely again.

(20 scores)

END