

Candidate's Name:

Signature:

Random No.						Personal No.		

(Do not write your School/ Centre Name or Number anywhere on this Booklet.)

500/3
GENERAL
SCIENCE
Paper 3
2024
1½ hours



UGANDA NATIONAL EXAMINATIONS BOARD
Uganda Certificate of Education
GENERAL SCIENCE

Paper 3
Biology

1 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

*This paper consists of **two** sections; **A** and **B**. It has **four** examination items.*

*Section **A** has **two** compulsory items. Answers to these items are to be written in the spaces provided.*

*Section **B** has **two** items. Answer **one** item from this section. The answer to this item **must** be written in the answer booklets provided.*

Any additional item answered will not be scored.

*Answer **three** items in all.*

SECTION A

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

Item 1.

Mr. Bagonza, whose farm is located on a hilly area grows crops and is worried after a heavy rain washed away part of the soil in his garden with some crops down into the river. Other plants were left with their roots exposed. Mr. Bagonza largely depends on farming and a natural environment for energy sources like firewood, burning charcoal for home use and sale. The District Environment officer said that Mr. Bagonza is responsible for the problems he is facing. Mr. Bagonza wishes to understand how he is responsible for the problems so as to solve the problem without moving away from his land.

Task

- (a) Help Mr. Bagonza understand the problems caused by his activities and the natural resources affected.

- (b) What advice can you give to Mr. Bagonza on how to live in the same place without causing much harm to the environment.

(c) Why is it important for Mr. Bagonza to conserve his environment?

Item 2.

Mr. Ali planted beans in his garden having mature sugarcanes. Just before the beans could flower, a heavy hailstorm hit the garden and all his crops were destroyed. After a month, Ali was surprised to see that there were new young sugarcanes growing but no new beans were growing.

Task

(a) Identify the plant structures affected by the hailstorm.

(b) Explain how the hailstorm affected the normal functioning of the crops

- (c) Explain why Ali did not have to worry about his sugarcanes, but instead get worried about beans.

SECTION B

Answer **one** item from this section.

Item 3

Three brothers, John, Khalid and Peter live together in a single room that is poorly ventilated. Peter smokes every day in the room in presence of his brothers. Peter later developed health complications including heavy coughing and chest pain. Four months later, John and Khalid also began coughing heavily, and they accused Peter of being responsible for their condition, a claim Peter denied.

Task

Explain to Peter the process by which his behaviour affected his brothers and possible health challenges faced, advise them on how to live a healthy lifestyle.

Item 4

Kirabo, a mother of four boys is currently pregnant expecting her fifth baby however her husband threatened to beat her if she produces a baby boy again since he wants to have a girl in his family. Due to the pressure and stress from her husband, Kirabo has resorted to heavy drinking of alcohol and missing antenatal visits.

Task

Help Kirabo's husband understand why the sex of the baby is not the choice of his wife but biologically determined. Explain the effects of Kirabo's behaviour on her body and the unborn baby and advise the family on how to overcome the challenges they are facing.