

CANDIDATES NAME:..... SIGN.....

553/1

BIOLOGY

Paper 1

2024

2½ hours

HOLY ANGELS HIGH SCHOOL MADERA

PRE-MOCK ASSESSMENT 2024

Uganda Certificate of Education

BIOLOGY

Paper 1

Theory

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

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

*Section **A** has **three** compulsory items.*

*Section **B** has two Parts; **I** and **II**. Answer **one** item from each part.*

*Answer **five** items in all.*

Any additional item(s) answered will not be scored.

Neat work is a must

Item	score	Examiners signature
Total		

SECTION A (60 SCORES)

Attempt all items in this section and in the spaces provided

Item 1

Mr. Okello's potato garden was seriously affected by thunderstorm when he had just completed weeding and had started root tuber formation. He forwarded this to LC1 who extended it to the ministry of disaster and preparedness to be considered for compensation but his request was left unconsidered. Mr. Okello is worried that his potatoes may not produce good yield to sustain his family.

Task

- (a) Identify the plant structures affected by occurrence of thunderstorms. (2 scores)

[illegible]

- (b) Explain how thunderstorms affected the processes in potato plants. (12 scores)

This image shows a full page of primary-ruled paper. It features multiple horizontal rows, each consisting of two parallel dashed lines. These rows are evenly spaced across the entire page, providing a guide for handwriting practice. The background is white, and there are no margins or additional markings present.

- (c) Why should the ministry compensate Mr. Okello even if the potato plants were able to grow again. (6 scores)

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Item 2

Calvin got an accident which damaged his testes at age of 4 years in 1999. In march 2023; he observed his agetates having beards and deep voices which they never had in their childhood. Contrary to what he absences on his agetates, Calvin has a soft voice and has no beards. His agetates often laugh at him this greatly affected his self-esteem. He is also unable to see things far from him but can see those close to him. He is worried that he has been bewitched by his grandfather.

Task

Using your knowledge of coordination in Animals, prepare a write up to help Calvin.

- (a) Why he doesn't have what his agetates have? (8 scores)

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- (b) The cause of his eye defect and how it can be corrected. (12 scores)

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Item 3

Musoke a known drunkard moves with his friends to the nearby trading center to take alcohol every day; one day on his way home, he saw a gang of thieves 30 meters away from him. Immediately after seeing the thieves who were moving close to him from the front, he experienced increase in rate of heart beat and breathing. He turned back quickly and ran away from the thieves.

Task

- (a) Describe how Musokes body coordinate from the time he saw the thieves up to the time when he turned back and ran away. *(5 scores)*

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- (b) What are the possible effects of musokes way of life as described in the above scenario? *(5 scores)*

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(c) What can enable Musoke change his way of life. (5 scores)

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SECTION B (40 SCORES)

PART I

Answer only one item from this part, responses should be provided in the answer booklets given.

Item 4

In a village in Eastern Uganda, swamps have been cleared for cattle rearing and sand mining. The area environment officer organized a radio talk show on sustainable use of natural resources in swamps unfortunately Marvin a resident of the area only heard concluding statement. “From the presentation I humbly request everybody to use natural resources sustainably”

Task

Explain to Marvin the environmental problems being addressed by the environment officer and how they can be solved; explain why the village should conserve the natural resources in swamps. (20 scores)

Item 5

According to Uganda vision 2040, the government is targeting to reduce population growth rate from 3.2% to 2.4%. The government has recognized the role of family planning is playing in the achievement of Uganda vision 2040. The government is targeting to take steps to expand access to family planning services through various stakeholders and has decided to launch a community sensitization program in order to achieve vision 2040.

Amidst increasing population; the government is challenged with increased number of HIV/AIDS patients admitted and has decided to merge this sanitization programs together.

Task

As the public relations officer in Ministry of Health; prepare a write up message that can be used during the sensitization programs. (20 scores)

PART II

Attempt only one item from this part

Item 6

In preparation for national athletics competitions in Kitgum, Okello 18-year-old athlete was given a meal containing cassava flour prior to the time the 5000m race was starting time. Okello's coach believed what his athlete ate will help him win the race but Okello didn't believe the coach's instructions how the meal he ate containing cassava would help him win the 5000m race, Okello was declared the winner however he felt pain in the hamstring muscle immediately after the race. He was carried to recording desk by the officials, 30 minutes later Okello moved back to their training camp walking and everyone wondered how was still able to return back to the camp.

Task

Explain to Okello the processes that what he ate went through to enable him win 5000m race, help other athletes understand how was able to walk back to the training camp and how his body returned back to the normal state. (20 scores)

Item 7

Mr. Opio and Mary have been married for 15 years and have five children all are girls. Mr. Opio has been blaming the wife for producing girls and promised to chase her away and bring another wife. Recently Mary gave birth to a baby boy with very white skin; white hair and pink eyes. When Opio heard that his wife has given to baby boy; he was very excited but upon seeing the boy he rejected that it's not his child and requested the clan leader to give him a letter to allow him chase away his wife and bring another woman. The clan leader has refused

to give him the letter and requested him to seek professional guidance and counseling services from the hospital.

Task

- (a) Using your knowledge of genetics, educate Mr. Opio what happened to his family. (20 scores)

“Success is fought for but failure is inevitable”