

**UGANDA CERTIFICATE OF LOWER EDUCATION**

**MID TERM II EXAMS 2024**

**S.3 BIOLOGY PAPER ONE**

**TIME 2:30 MINUTES**

**NAME……………………………………………………………………………………………………………..SIGN…………………….**

**LIN ……………………………………………………………………………………………………………………………………………….**

***INSTRUCTIONS TO SEMI-CANDIDATES***

ATTEMPT ALL ITEMS

**Item One**

40 years ago, Banda was a natural swamp with numerous papyrus plants, reptile species and several birds. Over time, people started constructing homes within the wetland until it became a township. However, residents still face a number of challenges both during wet and dry seasons and all these are attributed to the fact that the natural swamp is no longer in existence.

# Task:

Explain the problems in Banda, suggest how the residents can overcome them, and show them the value of conserving the natural environment.(20 scores)

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**Item two**

During his first hospital visit in January, Oloya, a five-year-old boy was found to be having wasted muscles, not physically active, had wounds on his legs and was generally weak. Special foods majorly comprising of Lato milk, millet porridge and fruits were recommended by the Nutritionist for Oloya. His condition has since then improved and data from the hospital records about his weight is as shown in **Table 1**

**Table 1:** shows changes in John’s body weight since his first visit to the hospital

|  |  |
| --- | --- |
| **Month** | **Weight (kg)** |
| January | 10.9 |

|  |  |
| --- | --- |
| March | 11.8 |
| May | 13.5 |
| July | 14.8 |
| September | 15.7 |

The normal weight range of boys is shown in **Table 2**

**Table 2:** shows normal weight range of boys between 2 to 7 years

|  |  |
| --- | --- |
| **Age (years)** | **Weight (kg)** |
| 2 | 8.9 – 15.1 |
| 3 | 11.9 – 17.9 |
| 4 | 13.4 – 20.4 |
| 5 | 15.2 – 24.4 |
| 6 | 16.9 – 26.5 |
| 7 | 18.6 – 31.5 |

# Task:

Clearly point out Oloya’s health challenges and explain how his body utilized the special foods to enable him improve his health.(20 scores)

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# Item three

Ketra, a S.3 teenager in one of the urban schools frequently urinates and feels thirsty. One day while seated in class, She heard a very loud sound of a tear gas canister from the scuffle between the police and a demonstrating mob in town. His heart pounded, eyes protruded and his heart beat increase. He stood out to go and hide, but his legs were too weak to support him, so he fell down and his friends laughed at him.

# Tasks

1. Explain how Ketra’s body coordinated from the time the loud sound was produced by the tear gas canister until he fell down while trying to run and hide(10 SCORES)

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1. Point out her bodily metabolic disorder and explain its causes(5 SCORES)

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1. Show Ketra how she can manage her health condition.(5 SCORES)

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# Item four

After a morning heavy carbohydrate meal, Nagenda, a male athlete started to warm up in preparation for the competition in long races. He competed favorably, but towards the end, he developed muscle cramps and was breathing heavily. Nonetheless he endured and finally won the race. After finishing, his heavy breathing continued, while the muscle crump progressively receded. He even managed to walk back home from where he took another meal.

# Task

Explain how Nagenda’s body utilized the morning meal to enable him win the competition, analyze the challenges his body encountered during the race and how it overcame them to enable him walk back home.(20scores)

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**END**

**THE SECRET TO SUCCESS WITHOUT HARD WORK IS STILL A SECRET.**