

Student's name..... Signature.....

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**BIOLOGY**

(Theory)

**Paper 1**

**OCT/NOV 2023**

**2 Hours**



**KABALEGA SEN.SECONDARY SCHOOL**  
**UGANDA CERTIFICATE OF LOWER SECONDARY EDUCATION**  
**END OF YEAR COMPETENCE BASED ASSESSMENT**  
**BIOLOGY (THEORY)**  
**PAPER ONE**  
**SENIOR 3**  
**2 Hours**

**INSTRUCTIONS:**

- *This paper consists of **ONLY one Section**.*
- *Respond to **all items** in this paper.*
- *All tasks carry **15 scores**.*
- *Illustrations in form of **drawings** should be made where necessary and **earns scores**.*

For official use only		
Items	Marks/scores	Teacher's comment
1		
2		
3		
4		
5		
<b>Total score</b>		

1. Residents of **Kijura Town** have a problem of poor garbage disposal and the whole town is full of flies. There has also been a serious outbreak of cholera. Epidemiologists have associated the outbreak with the increased number of houseflies in the town.

**Task:**

As a biology student, how can you help the residents to understand the relationship of the outbreak and the houseflies and how they can live a healthy lifestyle? **(15 scores)**

2. Students of Kabalega Secondary School are to participate in a science contest. The topic is, “***How maize plants make their own food, and how bees are reliable friends of maize plants.***” And the best students will be awarded prizes. As a biology student, you are to participate in the contest.

**Task:**

Make a write up of your presentation in the contest. **(15 scores)**

3. Opio’s mother who works far away from home, so she has a baby sitter who takes care of the five year old son Opio while she is away. One day, she found her son had been starved, very weak and exhausted. When the mother contacted the family doctor for advice, the doctor prescribed that Opio is first served with a glass of juice, and then a plate of rice with soup. He would then be allowed to rest. A few hours later, Opio was strong and active again. The mother wondered about the Doctor’s advice.

**Task:**

Explain how the Doctor’s prescription helped Opio to recover quickly. **(15 scores)**

4. As Geoffrey approached a swamp on his way home at around 10.00pm., the frogs stopped making noise and all of a sudden there appeared to her a long thing crawling through the grass. His heart started beating loudly, started breathing heavily and his eyes became wide open. He turned back and ran as fast as she could. Later on a closer look with other people Geoffrey realized that the long thing was not a snake but a long piece of wood.

**Task:**

How did Geoffrey’s body structures communicate to enable him escape. **(15 scores)**

5. A 48 year old patient presents the following symptoms- swollen feet and general body weakness (tiredness/fatigue).

Doctors recommended the patient to have a simple meal which included bread, piece of egg and water. After three hours resting, blood and urine samples were obtained and test on his urine sample made. The test results on concentration of different substances in blood, and urine are presented in table below.

Substance	Concentration of blood plasma (g/dm <sup>3</sup> )	Concentration of urine of normal person (g/dm <sup>3</sup> )	Concentration of patient's* urine sample (g/dm <sup>3</sup> )
Glucose	1	0	0.9
Urea	0.3	300	50
Plasma proteins	80	0	40

***Task.***

Explain why resting was necessary and analyze the patient's results to provide possible solutions on how the condition can be managed. ***(15 scores)***

**END**

***“Always Believe in Yourself”***