



MARANDA HIGH SCHOOL

Kenya Certificate of Secondary Education

PRE MOCK EXAMINATION 2023

FORM FOUR

231/3

BIOLOGY

Paper 3

APRIL 2023 – TIME: 1³/₄Hours

Name: _____ Adm No: _____

Class: _____

INSTRUCTION TO CANDIDATES

- Write your name, admission number and class in the spaces provided above.
- This paper consists of section 3 questions only.
- Answer All the questions in the spaces provided.

FOR EXAMINERS USE ONLY

QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
1	15	
2	10	
3	15	

1. You are provided by specimen Examine it and answer the questions that follow.

(a) Make a transverse section through K to obtain two halves .From one half of K ,squeeze the juice into a clean test tube and label K. Using juice K and the reagents provided, carry out the food the food tests to determine the food present in juice K. (8marks)

FOOD	PROCEDURE	OBSERVATION	CONCLUSION

(b)(i) What is the mode of dispersal for k and J (1mark)

(ii) Give a reason for your answer (1mark)

(c) Cut a transverse section through J. Examine the cut section carefully using a hand lens. Make a drawing of what you observe and label any three parts. (5marks)

2. The photomicrograph below represents a certain part of the plant.



(a)(i) From which plant organ was the photomicrograph obtained (1 mark)

(ii) Name the class of plant to which the section in the micrograph belong (1 mark)

(iii) Give one reason for your answer in (a)(i) above (1 mark)

(b) On the micrograph above, label the vascular bundle and the cortex (2marks)

(c) A response exhibited by a certain plant tendril is illustrated below.

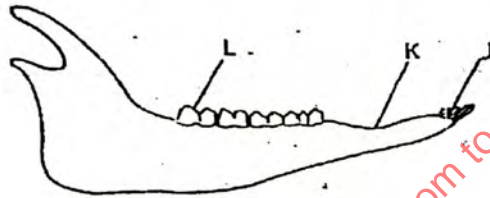


(i) Name the type of response (1 mark)

(ii) Explain how the response named in (a)(i) above occurs (2marks)

(iii) What is the importance of tactic responses to microscopic animals? (2marks)

3. The photograph below represents the lower jaw of a mammal



(a)(i) Name the mode of nutrition of the mammal whose jaw is shown (1mark)

(ii) State one structural and one functional difference between the teeth labelled J and L

Structural (1mark)

Functional (1mark)

(b) (i) Name the toothless gap labelled K. (1mark)

(ii) State the function of the gap (1mark)

(iii) Name the substance that is responsible for hardening of teeth (1mark)

(c) Organisms shown in the photograph below are often found in the same ecosystem. Examine them.



(i) Name the trophic level occupied by the antelope (1mark)

(ii) Give a reason for your answer (1mark)

(iii) Draw a pyramid of numbers for the organisms in the ecosystem (4marks)

(c)(i) State the relationship between the bacteria found in the root nodules of leguminous plants and the host plant. (1mark)

(ii) How does the host plant and the bacteria benefit from this relationship (2marks)
