NAME OF CANDIDATE: _____

ZINGWANGWA CLUSTER EXAMINATIONS

2024 MALAWI SCHOOL CERTIFICATE OF EDUCATION MOCK EXAMINATIONS

BIOLOGY

PAPER II

(40 marks)

Practical

Subject Number: M022/II

Time Allowed: hour sessions

Instructions

1.This paper contains **6 printed** pages. Please check
2.Write your **Name or Examination Number** at the top of this page and every sheet
3.This paper contains two sections, **A** and **B**. **Section A** has two descriptive questions and **Section B** has two questions on experiments.
4.Answer all the **four questions** in the spaces provided in the question paper. The maximum number of marks for each answer is indicated against each question. A pencil should be used for all drawings
5.In the **table** provided on this page, **tick** against the question number you have answered
6.**At the end of the examination**, hand in your question paper to the **invigilator** when time is called to stop writing

Question Number	Tick if answered	Do not write in these columns	
1			
2			
3			
4			

Section A (20 Marks) Essays

1.You are provided with a mortar, pestle, plant leaves alcohol, filter paper a small stick, a beaker and a testtube. Describe how you would show that the leaves contain different pigments

_____

_____

_____

_____

_____

_____

NAME OF CANDIDATE: _____

(10 marks)

2.Describe an experiment you can carry out to measure vital capacity and tidal volume of lungs. In your essay, include the procedure, observation and conclusion.

(10 marks)

SECTION B (20 marks)

3.You are provided with specimen **R** and **S**

a.To which group of flowering plants does specimen **R** belong?

NAME OF CANDIDATE: _____

_____1mark

b.Explain **one** adaptation of specimen **S** that enables it to survive in dry habitats.

_____

_____ 2marks

c.Measure the length of specimen R and record it in millimeters.

_____1 mark)

d.Calculate the magnification of specimen R if its drawing is 165mm long.

e.State

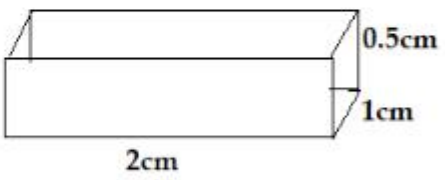
1,_____

2_____

3,_____3 marks

4.You are provided with each of the following

- ★ Specimen **W.**
- ★ 2 beakers containing solutions **P** and **Q.**
- ★ a scalpel or knife.
- Peel the specimen and cut it into 2 equal slices of 2cm by 1 cm by 0.5cm by using the knife



NAME OF CANDIDATE: _____

- Put one slice in each of the beakers
- Wait for 10 minutes
- Test for flexibility and measure the lengths of the slices

a.Record your results in the table below

Slice from Beaker	Flexibility	Length
P		
Q		

4marks

b.Identify each of the solutions **P** and **Q** by their concentrations and give an explanation for your answer in each case

(i)Hypotonic solution

_____1mark

Explanation

_____

_____2marks

(ii)Hypertonic solution

_____1mark

Explanation

_____

_____2marks

END OF QUESTION PAPER