CANDIDATE NAME: .....

KARONGA MULTI-CARER ACADEMY

2024 MALAWI SCHOOL CERTIFICATE OF EDUCATION MOCK EXAMINATION

BIOLOGY

PAPER II

(40 marks)

PRACTICAL

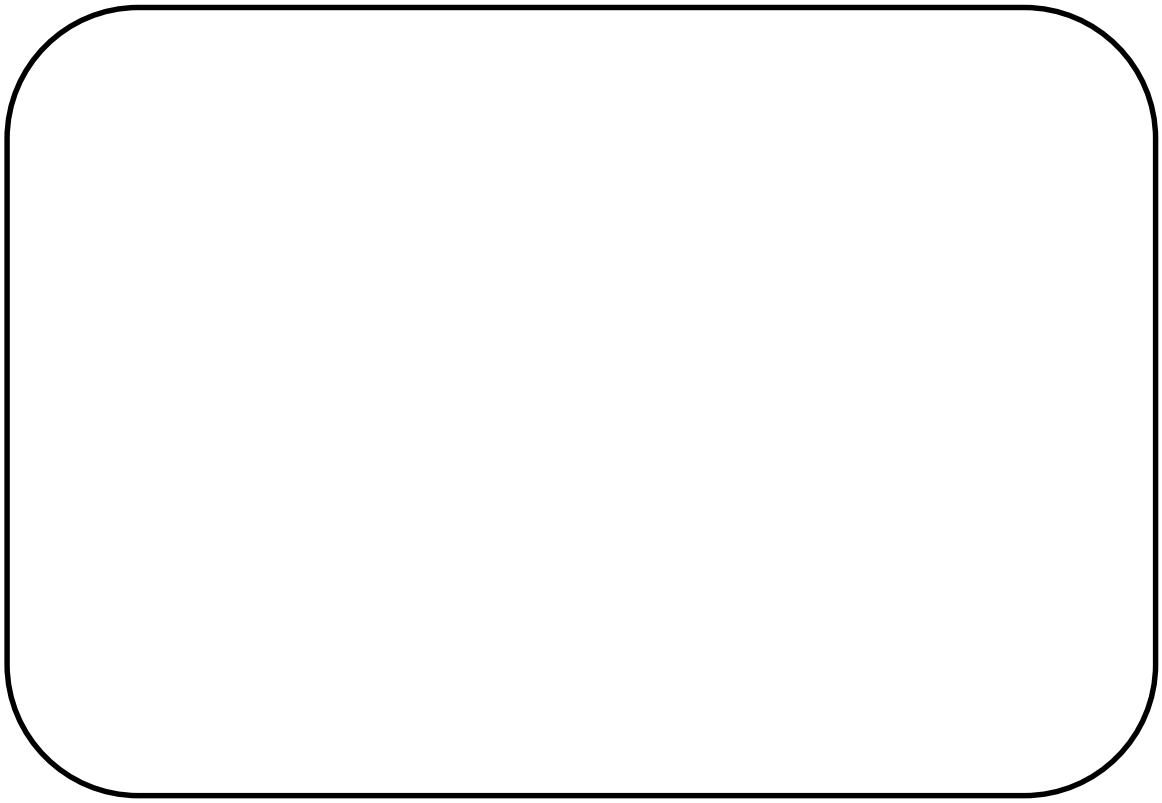
Instructions

1. **This paper contains 6 pages. Please check**
2. Before beginning, fill in your **Name** at the top of each page of the question paper
3. Answer **all** the **four** questions in the spaces provided on the question paper.
4. The maximum number of marks for each question is indicated against each question. A pencil should be used for drawings.
5. In the table provided on this page, **tick** against the question number you have answered.

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

CANDIDATE NAME_____

1 With the aid of a well labelled diagram describe how you would show that heat is produced during respiration. The diagram should have three correct labels.



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_____ 10 marks

CANDIDATE NAME_____

2 In an essay form, describe an experiment that could be conducted to investigate the effects of light intensity on the rate of transpiration in plant leaves. Your answer must include the following: **procedure**, **expected results** and **conclusion**.

10 marks

CANDIDATE NAME_____

3 You are provided with a fresh Irish potato, scape or knife, three containers with different solutions labelled **A, B** and **C**.

i. Cut the Irish potato and make 4 equal sized strips.

ii. Measure them accurately so that each strip be 18 mm long, 10 mm wide and 10 mm high.

iii. Check their flexibility and dip one strip into each container with solution and leave one on the bench.

iv. Leave the set up to stand for 20 minutes and observe by checking its flexibility and length.

a. Give the characteristics of the strips after the experiment in terms of length and flexibility.

Container	**Length of strip after the experiment**	**Flexibility strips after the experiment**
A		
B		
C		

(6 marks)

b. In which container did the strips increase most in length?

_____ (1 mark)

c. Explain your answer in (b) above.

_____

_____

_____ (2 marks)

d. Mention any one significance of osmosis.

_____ (1 mark)

CANDIDATE NAME_____

4 You are provided with specimen **P, Q, R** and **S**. Use them to answer the following questions.

a. Why specimen **S** belongs to monocotyledonous plants?

_____(1 mark)

b. i. Which of the following specimen **R** and **S** can survive long in dry areas?

_____(1 mark)

ii. Explain your answer in **4b (i)**

_____

_____(1 mark)

c. Explain any one structure of specimen **R** for photosynthesis.

_____

_____(2 marks)

d. Explain one way in which specimen **P** and **Q** contribute to the nitrogen cycle.

_____

_____ (2 marks)

e. Briefly describe how you can test specimen **P** for lipids.

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_____ (3 marks)

END OF QUESTION PAPER