

#### **EXAMINATION NO.:**

# THE MALAWI NATIONAL EXAMINATIONS BOARD

#### 2005 MALAWI SCHOOL CERTIFICATE OF EDUCATION EXAMINATION

## **BIOLOGY**

Friday, 14 October

Subject Number: M022/II

Time Allowed: 2 hour sessions

8:30 am onwards

## PAPER II

(40 marks)

## **Practical**

### Instructions

- 1. This paper contains 6 pages. Please check.
- 2. Write your Examination Number at the top of this page and of every sheet.
- 3. Answer all the four questions in the spaces provided on the question paper. The maximum number of marks for each answer is indicated against each question. A pencil should be used for all drawings.

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Turn over

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. You a		ovided with a small fish.	
a. 👍	(i)	Draw the fish and label any two locomotory structures.	
	•		
-			
			•
* 1 <b>.</b>	Vijes		
			(4 marks)
	(ii)	Calculate the magnification of your drawing.	•
			29 V
Ь.	(i)	Describe the shape of the fish.	(2 marks)
	(1)		
	(ii)	What is the advantage of this shape to the fish?	(1 mark)
	<b>\</b> ",		
			(1 mark)
c.	How	does drying preserve the fish?	
	•		
			(1 mark)
d.	State	two nutrients that human beings get from fish.	
۵.		The national that hamai beings get from fish.	
•	<del></del>		
			(2 mark)

2. The table below shows the effect of storage time on amount of vitamin C in potatoes. Use it to answer the questions that follow.

Storage Time	Amount of Vitamins
(months)	(mg/100 g)
0	30
2	20
4	15
6	10
8	8

against time.			(6 marks
What is the effect of storage time on vitamin	C?		
		1. A . A . A	•
How much vitamin C would be found in the			(1 marl
	*.	e de la companya de l	
		-	(1 marl
What disease is prevented by vitamin C in h	ıman beings?		
			(1 marl
	1. 10	5 5 5 F	
Apart from potatoes, mention <b>two</b> other sour			
Apart from potatoes, mention two other sour		C	
Apart from potatoes, mention two other sour	ces of vitamin	C	

Continued/...

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2. (Continued)

a. (Graph plotting)

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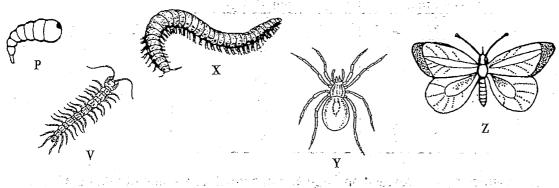
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a. (i)	Which one is a stem	1?			
	w. Talan and a same and a same and a same and a same and a same and a same and a same and a same and a same a sam				(1 mark)
(ii)	Give a reason for yo	our answer to q	uestion a(i).		
·					
		: 			
					(1 mark)
		· · · · · · · · · · · · · · · · · · ·			(2 marks)
. Stat	te <b>one</b> similarity betwo	een the specimo	ens <b>A</b> and <b>B</b> .		(2 marks)
. Stat	te <b>one</b> similarity betwo	een the specimo	ens <b>A</b> and <b>B</b> .		(2 marks) (1 mark)
Stat	te <b>one</b> similarity betwo	een the specim	ens <b>A</b> and <b>B</b> .		
	te <b>one</b> similarity betwo				
					(1 mark)
					(1 mark)
					(1 mark)

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4. The figure below shows five invertebrates and a dichotomous key. Use it to answer the questions that follow.



1.	Wings absent		11 k
2.	Legs present Legs absent		# - 11
3.	More than 8 legs Eight legs present	See 4 Tick	
4.	Long antennae	~	<b>.</b> 1

a.	Identity the invertebrates:		 * 4	
• ,=	P	 V	 	

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	TITLE A AND A CONTRACTOR AND A CONTRACTO	o organisms labelled ${f X}$ and ${f V}$ ?	
n.	- what two realures are common i	O OFFINISHIS TADELLEG A ALIG V!	
- ·		0 0.8	

					(2 marks)
. · (i)	Which of the org	anisms in (a) is stil	ll in the develo	pmental stages?	

\_\_\_\_\_ (1 mark)

(ii) Which of the organisms in (a) can transmit diseases to tamed animals?

(1 mark)

# END OF QUESTION PAPER

NB: This paper contains 6 pages.