EXAMINATION NO.: _____

NDIRANDE COACHING CENTRE

2023 MALAWI SCHOOL CERTIFICATE OF EDUCATION EXAMINATION

BIOLOGY

Friday 07 April **Subject Number: M022/II**

Time Allowed: 2-hour sessions
14:00 hrs onwards

PAPER II

(40 marks)

Instructions

1. **This paper contains 5 printed pages. Please check.**
2. Write your **Name** at the top of each page of the question paper.
3. This paper contains sections **A** and **B.** Section **A** has two descriptive questions and Section **B** has **two** questions on experiment
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 number of question 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			

Turn over/…

Section A (20 marks)

1. Describe an experiment that can be conducted to estimate population of fish in a pond. In an essay form, your answer should include procedure, expected results and conclusion.

(10 marks)

Continued/…

2. Describe an experiment that could be carried out to show that leaves contain different types of pigments. In an essay form, your answer should include procedure, expected results and conclusion.

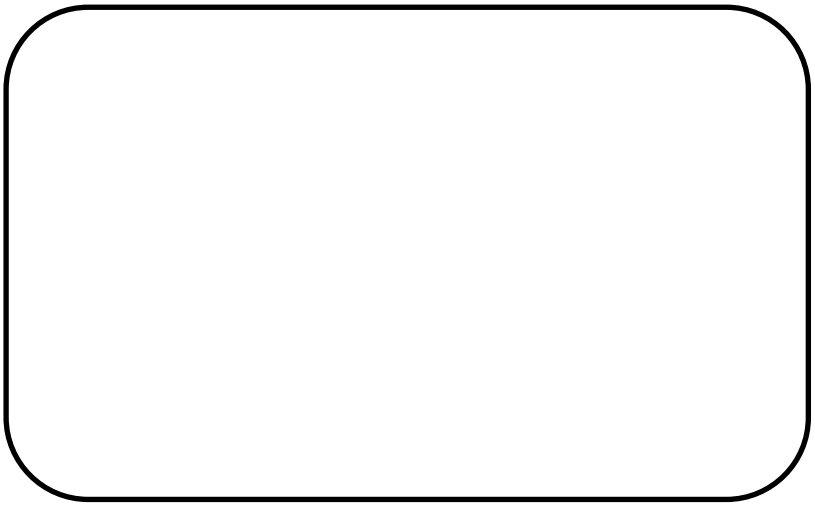
(10 marks)

Continued/…

Section B (20 marks)

3. You are provided with the specimen labelled **X**

a. Draw the specimen X and label any two locomotory parts



(4 marks)

b. State any **one** nutrient found in the specimen.

_____

(1mark)

c. Explain any **two** adaptations of the specimen to survive in its habitat

_____

_____

_____

(2 marks)

d. Write down the scientific name of specimen **X**

_____

(1 mark)

e. State any **two** human practices that are leading to decrease in the population of the specimen **X**

_____

_____

_____

(2 marks)

Continued/…

4.You are provided with specimen **Y**

a. Name the major food substance stored in the specimen

_____

(1 mark)

b. Explain how did the food substance named in **4.a above** reach the specimen from the leaves.

_____

_____

(2 marks)

c. Explain what happens to the stored food substance when the specimen sprouts

_____

_____

(1 mark)

d. Would you classify the specimen as a stem or a root? Give a reason for your answer.

_____

_____

(2 marks)

e. Explain why during starch test the specimen is firstly boiled in water.

_____

_____

(1 mark)

f. Suppose the specimen was drawn to a magnification of **x4**, calculate the length of the drawing. **(3 marks)**

END OF QUESTION PAPER

NB: This paper contains 5 printed pages.