

STUDENT NAME: \_\_\_\_\_ SCHOOL NAME \_\_\_\_\_



**SOUTH WEST EDUCATION DIVISION**  
**2025 MALAWI SCHOOL CERTIFICATE OF EDUCATION**  
**MOCK EXAMINATION**

# **CHEMISTRY**

Wednesday, 09<sup>th</sup> April 2025

Subject number: M038/II

## **PAPER II**

Time allowed: 2 hours

### **Practical**

10:00 am onwards

**Instructions:**

1. This paper contains 5 printed pages  
Please check.
2. Write your **Examination Number** at the top of each page.
3. Answer **all** the 4 questions in the spaces provided.
4. Use of scientific calculator is allowed.
5. The maximum number of marks for each answer is indicated against each question.
6. In the table provided on this page, **tick** against the question number you have answered.
7. Hand in your paper to the invigilator when time is called to stop writing.

Questions Answered	Tick if Answered	Do not write in this column
1		
2		
3		
4		

**SECTION A (20 marks)**

1. With the aid of a well labelled diagram, describe how iron spoon can be electroplated with copper.  
Include relevant chemical equations

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**(10 Marks)**

Continued.../

2. Given three plastic samples labeled A, B, and C, describe an experiment you can conduct to classify them as either thermosetting plastics or thermosoftening plastics.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**(10 marks)**

Continued.../

## SECTION B (20 marks)

3. You are provided with the following Materials: Aluminum oxide, Calcium oxide and Silicon oxide, 3 test tubes in a test tube rack, and distilled water.

a. Dissolve each oxide in a beaker of 50 ml of distilled water.

b. Shake the mixtures thoroughly

c. Dip red and blue litmus paper in each solution.

d. Record your observation in a table below

Solution	Colour of blue litmus paper	Colour of red litmus paper	Acid/ ,Base /Amphoteric
Calcium oxide			
Aluminum oxide			
Silicon oxide			

(9marks)

Mention the salt formed when the sodium hydroxide is mixed with the Aluminum solution

(1 mark)

4. You are provided with three unknown organic compounds labelled **X**, **Y**, **Z** belonging to the following families: alkanolic acid, alkanol and alkane but not in that order.

You are also provided with the distilled water in wash bottles, blue litmus paper, three test tubes in a test racks and droppers.

- a. On each substance, perform the test shown in the table of the results and record your observation in appropriate space. Wash the test tubes after use
- b. Record your observation in a table below

Table of results

<div>Test Substance</div>	Add 3 – 5 ml of water to 7 ml of unknown compound	Acid test
	RESULTS	RESULTS
X		
Y		
Z		

(5 marks)

- c. Clean the test tubes with the distilled water.
- d. Dip blue litmus paper in the beakers that form two layers
- e. Note and record the colour change of the blue litmus paper in the table of results above.
- f. Clean the test tubes with the distilled water.
- g. Identify the families of organic compounds X, Y and Z
- X \_\_\_\_\_ (1 mark)
- Y \_\_\_\_\_ (1 mark)
- Z \_\_\_\_\_ (1 mark)
- h. Which organic compound would react with ethanol to form an ester?
- \_\_\_\_\_ (1 mark)
- i mention any one example of drug that is manufactured from alkanoic acid
- \_\_\_\_\_ (1 mark)

END OF QUESTION PAPER

NB: This paper contains 5 printed pages.