KIYALA HIGH SCHOOL

END OF YEAR ASSESSMENT TEST 2024 CHEMISTRY PAPER 3

S.3

Time: 2 Hours INSTRUCTIONS:

- This paper consists of *one* compulsory examination item.
- Answers to this item are to be written in the spaces provided in this booklet.
- Use a blue or black ink only.
- ➤ All working must be clearly shown.
- Mathematical tables and silent non programmable scientific calculators may be used.
- > Learners are advised to carefully read the item.
- Make sure you have all the chemicals and apparatus you may need and plan appropriately before starting.

Item 1

Abacus pharmaceuticals Ltd located in Kampala has got an order from various hair salons to supply them with sulphur ointment for them to use remove dead skins and improve skin texture.

Sulphur is obtained by reacting dilute Hydrochloric acid and Sodium thiosulphate at room temperature. The thiosulphate reacts with the acid according to the following equation.

$$S2O3^{2-}(aq) + 2H^{+}(aq)$$
 \longrightarrow $SO2(g) + S(s) + H2O(l)$.

Due to high demand for this ointment by the users, the company management has been tasked to supply the ointment as fast as possible.

One of the pharmacists suggests that for more sulphur to be produced at a faster rate, a higher concentration of sodium thiosulphate should be used but other pharmacists are not yet convinced.

You are provided with;

BA1: A solution of sodium thiosulphate

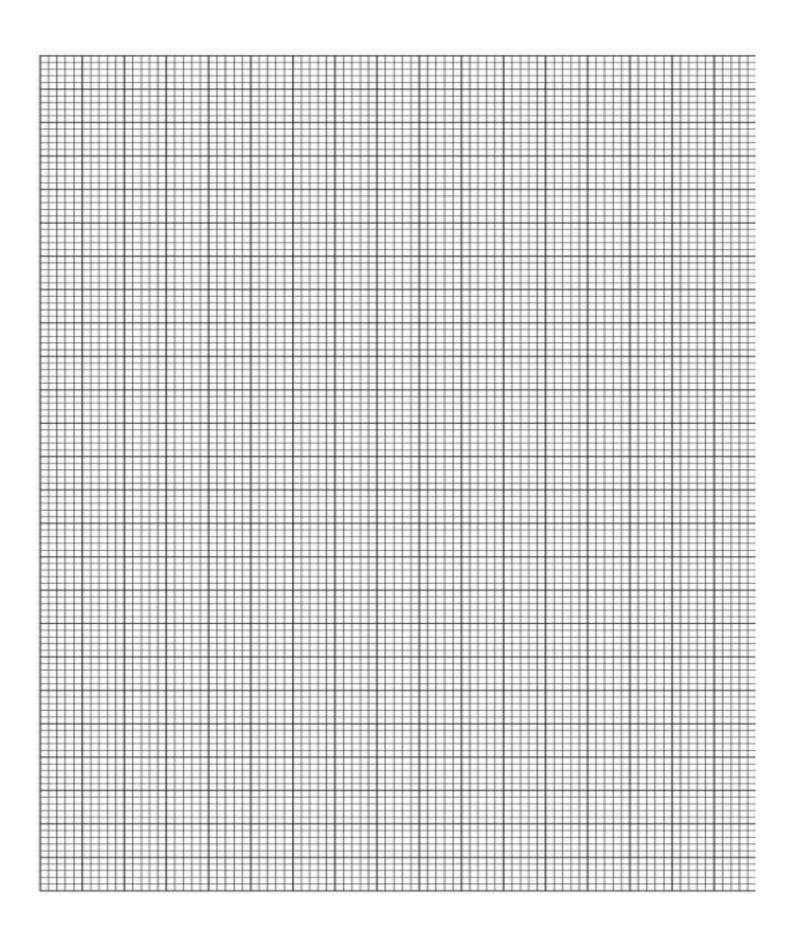
BA2: A solution of hydrochloric acid.

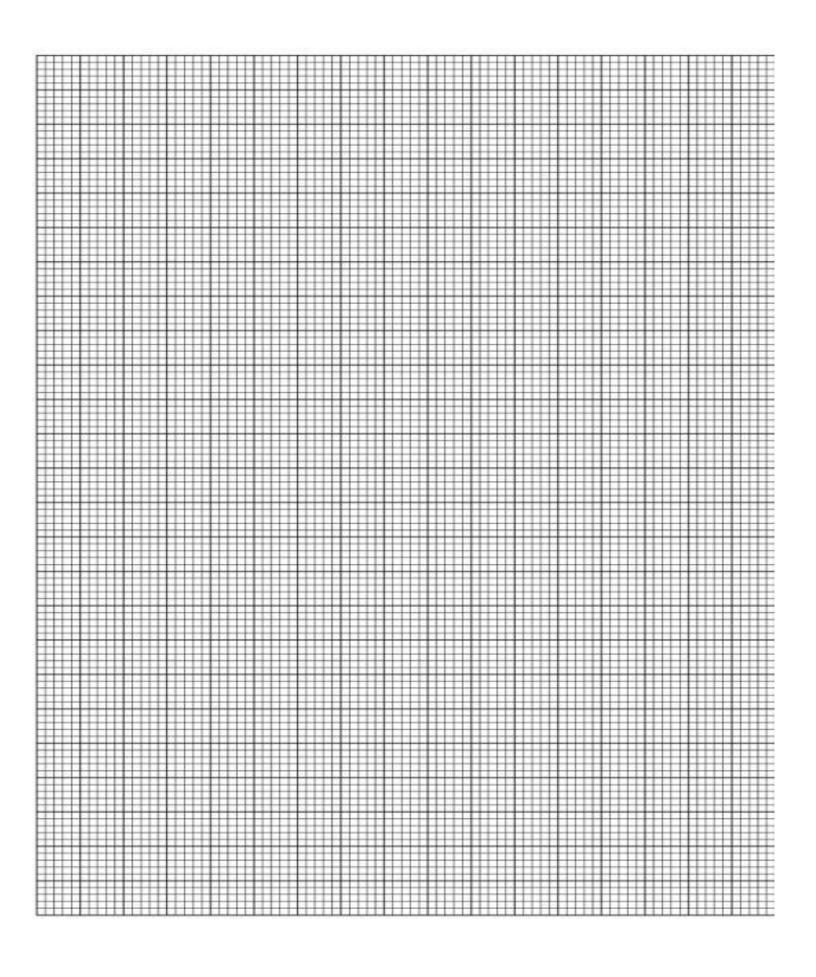
Other laboratory apparatus

_	· · · · · ·	
	ACI	
•	11.NM.	

Using your knowledge of chemistry; a) Design an experiment you will carry out to bring the pharmacists into conclusion.

	•••
	••
	• •
	•••
	• •
	••
	••
	••
	• •
	••
	• •
	•
	• •
	•
	••
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	•••
b) Carry out the experiment and record your findings	•••
b) Carry out the experiment and record your findings	•••
b) Carry out the experiment and record your findings	•••
b) Carry out the experiment and record your findings	•••
b) Carry out the experiment and record your findings	•••
b) Carry out the experiment and record your findings	•••
b) Carry out the experiment and record your findings	•••
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	
b) Carry out the experiment and record your findings	





c) Analyze your findings.
d) Help the company pharmacists to make a conclusion

END