

Name.....

Signature.....

School.....

Index No.....

545/2
CHEMISTRY
Paper 2
July/August 2024
2 Hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Certificate of Education

CHEMISTRY

Paper 2

(Practical)

2 Hours

INSTRUCTIONS TO CANDIDATES;

*This paper consists of **one compulsory** examination item. Answers to this item are to be written in the spaces provided in this booklet. Use **blue** or **black** ink.*

All working must be clearly shown. Graph spaces are provided.

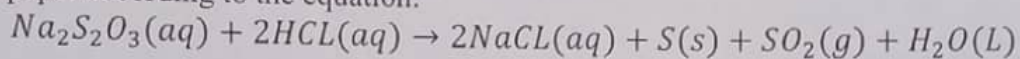
Mathematical table and silent non-programmable scientific calculators may be used.

*Candidates are advised to carefully read the item, make sure they have all the apparatus and chemicals they may need and then **plan** appropriately before starting.*

Item 1

In a photographic industry, sodium thiosulphate is used to improve the quality of photographic printing paper. One of the workers in a printing studio has advised that temperature in the printing machine (printer) must be adjusted/monitored as it affects the rate of reaction of the sodium thiosulphate on the printing paper so as not to delay their customers. Other workers seemed not to understand his argument and they wanted to investigate the issue at hand.

Sodium thiosulphate reacts with hydrochloric acid, the same way it does with photographic printing paper according to the equation:



You are provided with the following:

- Dilute hydrochloric acid solution, labelled BA₂
- Sodium thiosulphate solution, labelled BA₁
- Some laboratory apparatus.

Task:

As a chemistry learner,

- (a) Design an experiment that can be used to help the workers understand their colleague's argument.

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

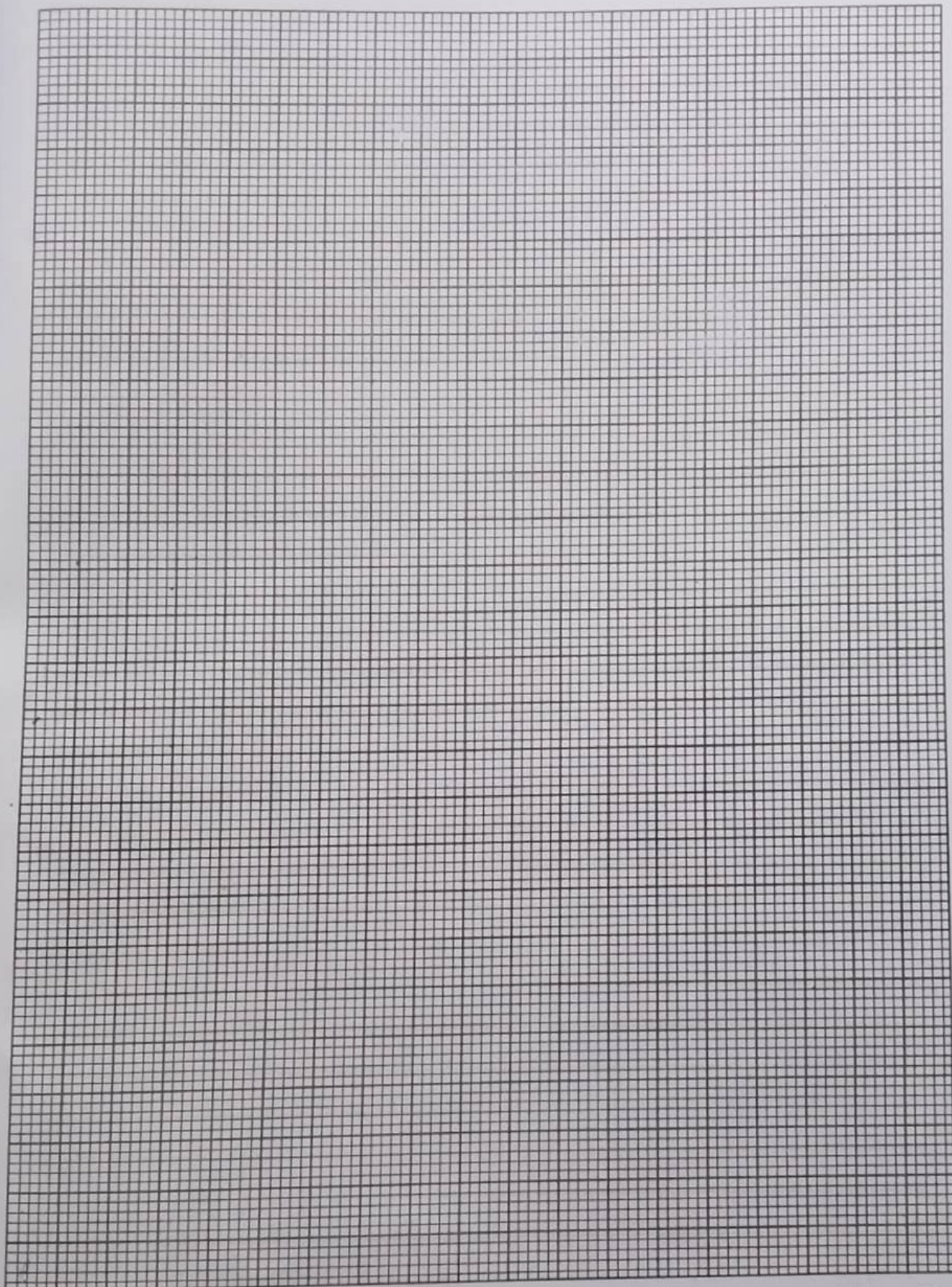
Lined area for writing answers.

Turn Over

(b) Perform the experiment and record your results.

Lined area for recording results.

(c) Analyse and interpret your results



Turn Over

Lined paper for writing.

(d) What conclusion can you obtain from part C.

END