545/2 Inst. Sch

CHEMISTRY

PRACTICAL

INSTRUCTIONS

Paper 2

July/August 2024



### TORORO ARCHDIOCESE EXAMINATIONS BOARD

# Uganda Certificate of Education MOCK EXAMINATIONS – AUGUST 2024 CHEMISTRY PRACTICAL INSTRUCTIONS 545/2 Inst. Sch

#### CONFIDENTIAL

This information is given to facilitate preparation of examination.

Great care should be taken that the information given below does not reach the candidates either directly or indirectly.

# INSTRUCTIONS FOR PREPARING CHEMICALS AND APPARATUS

[NB: The Headteacher must ensure that the teacher responsible for preparing the chemicals and apparatus hands in his/her trial results properly sealed in a separate envelope and firmly fastened (attached) to the candidates scripts envelope(s)]

Turn Over

#### Confidential.

- The description of the reagents and chemicals specified below does not necessarily correspond with the description in the question paper. Candidates must not be 1. informed of the differences.
- Candidates are not allowed to use reference books (i.e text books, booklets on 2. qualitative analysis etc) during examination.
- In addition to the fittings and substances ordinarily contained in a chemistry 3. laboratory, each candidate will require;

1 piece of white sheet of paper.

1 glass beaker or conical flask (250ml)

1 measuring cylinder (100ml)

1 measuring cylinder (50ml)

1 burrette (50ml) or measuring cylinder (10ml)

1 stop clock/watch

120cm<sup>3</sup> of distilled water

160cm<sup>3</sup> of solution BA1

60cm<sup>3</sup> of solution BA2

BA1 is prepared by dissolving 30g of sodium thiosulphate salt [Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>:5H<sub>2</sub>O] in one litre of solution.

BA2 is 1M HCl prepared by diluting 86cm<sup>3</sup> of ordinary concentrated hydrochloric acid to make one lite of solution. in contra in

**END** 

Name	Centre/Index No
Signature	

545/2

CHEMISTRY Paper 2 July/August 2024 2 Hours



## TORORO ARCHDIOCESE EXAMINATION BOARD

Uganda Certificate of Education

#### **MOCK EXAMINATIONS 2024**

#### CHEMISTRY PRACTICAL

#### PAPER 2

#### 2 Hours

#### INSTRUCTIONS TO CANDIDATES

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

All working must be clearly shown. Graph paper will be provided.

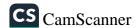
Mathematical tables and silent non-programmable scientific calculators may be used.

You are not allowed to use reference books (i.e text books, books on qualitative analysis etc)

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.

**Turn Over** 

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#### Item 1

Most health centres in Uganda use Sulphur when mixed with other chemical substances for the treatment of skin conditions. The large number of patients in the various health centres has increased the demand of sulphur. Sulphur can be produced by the reaction between sodium thiosulphate and dilute hydrochloric acid according to the equation:

$$S_2 O_3^{2-}_{(aq)} + 2H^+_{(aq)} \longrightarrow S_s + SO_{2(g)} + H_2O_{(1)}$$

The pharmacists have advised that concentration of the above chemicals used to produce sulphur must be adjusted for a better yield of sulphur because it affects the rate of the reaction.

You are provided with:

BA1 which is sodium thiosulphate solution and BA2 which is dilute hydrochloric acid.

# Task

As a learner of chemistry;

_(i)	Design_an experiment you will carry out to determine the effect of concentration on the rate of reaction between BA1 and BA2.



(ii)	Carry out the experiment and record your findings.
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(iii)	What conclusion can you make from your findings?

**END** 

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