

Candidate's Name:

INDEX NUMBER:

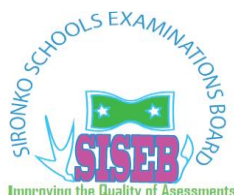
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CHEMISTRY

Paper 2

2024

2 hours



SISEB-MOCK EXAMINATION 2024
Uganda Certificate of Education
CHEMISTRY
Paper 2
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 paper will be provided.

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

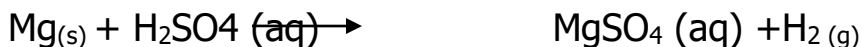
You are not allowed to use reference books (i.e textbooks, booklets on qualitative analysis etc)

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.

Item 1

Magnesium sulphate is an important ingredient used in pharmaceutical industries to manufacture medicine that treat hypomagnesaemia, a condition where magnesium levels are below the norm.

Magnesium sulphate can be obtained by reacting magnesium metal and dilute sulphuric acid as shown below



The technical team in the industry is thinking of a way of increasing production rate of magnesium sulphate in order to have enough raw materials for manufacturing medicine so as to meet the increasing demand of medicine on the market. There is enough stock of the acid in the industry stores, it has been realized that there is a relationship between rate of formation of magnesium sulphate and the concentration of the acid.

Among the materials and apparatus provided to you include; Magnesium ribbon, dilute sulphuric acid of different concentrations, knife, stop clock, measuring cylinders, distilled water, conical flask and some other requirements.

Task

Carry out a scientific investigation the establish the realization of the technical team and make appropriate recommendations to the team.

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[illegible]

[illegible]

[illegible]

END