

Name.....

Signature..... Combination.....

P525 /2

CHEMISTRY

PAPER 2

APRIL, 2025

2 $\frac{1}{4}$ HOURS

**Uganda Advanced Certificate of Education
(ADVANCED LEVEL SECONDARY CURRICULUM)
END OF TERM ONE EXAMINATIONS - 2025**

S.5 CHEMISTRY

Paper 2

2 Hours 15 Minutes

INSTRUCTIONS TO SEMI-CANDIDATES

This paper consists of one compulsory item. Use the spaces provided to respond to the item. Kindly be tidy in your presentation.

Work in pencil will not be scored. Use a blue or black ink.

Mathematical calculators may be used.

You are not allowed to use the apparatus for the first 15 minutes. Use this time to check that you have all reagents and apparatus you need.

Item one

A pharmaceutical company is in the process of making a better laxative for constipation patients to replace **Bisacodyl** that has more side effects. Sodium sulphate has been suggested as an alternative. However, the chief chemist has advised that the preferred stock solution of sodium sulphate is that obtained using an alkali with a molar concentration above **1M** and an acid of less than **1M**.

Sodium sulphate can be prepared by a reaction between sodium hydroxide solution and dilute sulphuric acid.

One of the intern students would wish to know whether the alkalis found in the company stores is suitable.

You are provided with the following from the company stores

BA1 which is a solution of sodium hydroxide of unknown concentration

BA2 which is a **0.05M** sulphuric acid solution.

Confidential

BA1 is a solution made by dissolving 4.0g of sodium hydroxide pellets in one litre of distilled water.

BA2 is a 0.05M sulphuric acid.

Phenolphthalein indicator.

Methyl orange indicator.