Candidate's Name:	Signature:	• • • • • • • • • • • • • • • • • • • •

545/2 CHEMISTRY Paper 2

2 Hours



TEA EXAMINATION BOARD

Uganda Certificate of Lower Secondary Education

MOCK EXAMINATIONS-JULY/AUGUST 2024

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 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. text books, 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.

Due to the acute injuries that resulted into swellings and excessive joint pain to a section of the participants on the school's MDD team in the recently- concluded inter school's MDD competition, a school is exploring an innovative method to locally produce instant cold packs.

Their idea involves using some of the solid compounds in their laboratory. This approach would potentially reduce the cost of buying commercial instant packs.

However, the school needs to determine which of the substances can be dissolved in water with absorption of heat from the surroundings and hence cause a cooling effect on the affected body part of the injured participants.

The Headteacher has tasked you to carry out the investigation and has provided you with the following:

Substances A and **B**; which are samples of substances from the science room.

Task

(a) As Chemistry learner with the materials available to you;			
(i) Design an experiment you will carry out to help school make the right			
choice. (Your design should include the following; aim, variables,			
hypothesis, procedures, risks and mitigation)			

Carry out the experiment and record your data.(At least seven readings are required)

(ii)	analyse your results and advise the Headteacher accordingly

