

CONFIDENTIAL
THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

NOVEMBER 2015

032/2A

CHEMISTRY 2A
(ACTUAL PRACTICAL A)

24 HOURS ADVANCE INSTRUCTIONS

1.0 IMPORTANT

- 1.1 GREAT CARE MUST BE TAKEN **NOT** TO DIVULGE THESE INSTRUCTIONS TO BOTH CANDIDATES AND UNAUTHORIZED PERSONS EITHER DIRECTLY OR INDIRECTLY.
- 1.2 NOTE THAT YOU WILL **NOT** BE ALLOWED TO OPEN THE ENVELOPE CONTAINING THE QUESTION PAPER BEFORE THE TIME OF COMMENCEMENT OF THE EXAMINATION.

2.0 PREPARATION AND LABELLING OF CHEMICALS

2.1 Question 1

Prepare the following:

- 0.1 M hydrochloric acid solution. Label it **G** and allow 100 cm³ per candidate.
- 0.05 M anhydrous sodium carbonate (Na₂CO₃), label it **B** and allow 100 cm³ per candidate.
- Methyl orange indicator for sharing in the ratio of one to two candidates.

2.2 Question 2

Prepare the following:

- 0.5 M sodium thiosulphate (Na₂S₂O₃) solution. Label it **U** and allow 25 cm³ per candidate.
- 0.1 M hydrochloric acid (HCl) solution. Label it **V** and allow 50 cm³ per candidate.
- Distilled water and allow 25 cm³ per candidate; label it **T**.
- One stopwatch and a plain paper marked with a uniform letter **X** per candidate.

2.2 Question 3

- Prepare 3 g of lead (II) nitrate (Pb(NO₃)₂) and label it **M**.
- Provide enough distilled water 300 cm³ per candidate.
- Provide heat source or burner for sharing (candidates must not exceed four).

3.0 NOTE TO EXAMINATIONS SUPERVISOR AND LABORATORY TECHNICIAN/HEAD OF CHEMISTRY DEPARTMENT

Laboratory Technician or Head of Chemistry Department should perform an experiment of Question 1 and 2 during the **last thirty (30) minutes of the examination time** and submit to the Council the experimental results **together with the candidates' data** (Answer booklets).

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