

CONFIDENTIAL

THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION
NOVEMBER 2014

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 TO 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:

- 0.05 M oxalic acid ($\text{H}_2\text{C}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$) solution. Label it **H** and allow 200 cm³ per candidate.
- 0.05 M potassium hydroxide solution. Label it **M** and allow 200 cm³ per candidate.
- Provide phenolphthalein indicator for sharing in the ratio of one to two candidates.

2.2 Question 2

Prepare the following:

- 1 M sodium thiosulphate ($\text{Na}_2\text{S}_2\text{O}_3$) solution. Label it **Z** and allow 20 cm³ per candidate.
- 0.1 M nitric acid (HNO_3) solution. Label it **T** and allow 20 cm³ per candidate.
- Distilled water and allow 100 cm³ per candidate.
- One stop-watch to each candidate
- A white plain paper uniformly marked **X** to all candidates.

2.3 Question 3

- Provide each candidate with 3 g of lead (II) chloride (PbCl_2) and label it **Q**.
- Provide about 300 cm³ distilled water per candidate.
- Heat source or burner for sharing in the ratio of one to four candidates.

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

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

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