

CONFIDENTIAL

THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION
OCTOBER 2011

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 ENVELOP 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:

- 0.2M HNO₃, label it **AA** and allow 150 cm³ per candidate.
- 0.1M NaHCO₃, label it **BB** and allow 150 cm³ per candidate.
- Enough methyl orange indicator for sharing, label it **MO**.

2.2 Question 2

Prepare the following:

- 0.13M Na₂S₂O₃ (sodium thiosulphate), label it **TT** and allow 60 cm³ per candidate.
- 2M HCl, label it **HH** and allow 50 cm³ per candidate.
- 50 cm³ distilled water per candidate.
- Stopwatch

2.3 Question 3

- Provide each candidate with 3 g of ammonium chloride (NH₄Cl) and label it **S**.
- Provide enough distilled water 300cm³ per candidate.
- Heat source or burner for sharing.

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 immediately after the last session of the examination and submit to the Council the experimental results together with the candidates' results (Answer booklets).

Page 1 of 1

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