

CONFIDENTIAL

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

NOVEMBER 2016

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 PAPERS BEFORE THE TIME OF COMMENCEMENT OF THE EXAMINATION.

2.0 PREPARATION AND LABELLING OF CHEMICALS

2.1: Question 1

Prepare the following:

- 1 M hydrochloric acid solution. Label it **Q** and allow 20 cm³ per candidate.
- 0.1 M ammonium solution (NH₄OH), label it **P** and allow 100 cm³ per candidate.
- Provide methyl orange indicator for sharing in the ratio of one to two candidates.

2.2: Question 2

Prepare the following:

- 0.25 M sodium thiosulphate, label it **BB** and allow 60 cm³ per candidate;
- 0.10 M hydrochloric acid, label it **DD** and allow 60 cm³ per candidate;
- A stop watch/clock and a thermometer per candidate;
- Drawn a uniform cross (X) on one side of white papers, provide one paper for each candidate.

2.3: Question 3

- Provide each candidate with 3 g of lead nitrate (Pb(NO₃)₂). Label it **R**.
- Distilled water
- Heat source for sharing (Two candidates).

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

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

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