

CONFIDENTIAL

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

NOVEMBER 2017

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:

- 0.1 M hydrochloric acid, label it **PP** and provide 125 cm³ per candidate.
- A solution made by dissolving 5.23 g of sodium carbonate in distilled water to make 1 dm³ of solution, label it **RR** and provide each candidate with 125 cm³.
- Methyl orange indicator, label it **MO**, it should be shared by 2 candidates only.

2.2: Question 2

Prepare the following:

- A solution made by dissolving exactly 20 g of sodium thiosulphate in 1 dm³ of solution, label it **E** and allow 80 cm³ per each candidate.
- 2 M nitric acid, label it **F** and allow 50 cm³ per each candidate.
- Distilled water, label it **G**, allow 80 cm³ per candidate.
- Draw a cross (X) by using a blue ink pen on a white sheet of paper and provide each candidate.
- A stop watch/clock.

2.3: Question 3

- Prepare 4 g iron(II) sulphate FeSO₄·7H₂O for each candidate and label it **Q**.
- Heat source (sharing for 2 candidates).
- Distilled water.

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**. The experimental data must be recorded in the form in page 2 of these instructions and submit to the Council together with the candidates' scripts (Answer booklets).

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