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THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION
OCTOBER 2010

032/2A

CHEMISTRY 2A
ALTERNATIVE A PRACTICAL

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 ARE NOT 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

- (a) Dissolve exactly 13.8 g of potassium carbonate (K_2CO_3) in distilled water and make the solution to 1000 cm^3 . Label this solution D and allow about 150 cm^3 per candidate.
- (b) Dissolve exactly 7.75 g of hydrochloric acid (HCl) in distilled water and make the solution to 1000 cm^3 . Label this solution N and allow about 150 cm^3 per candidate.
- (c) Methyl orange indicator: allow 20 cm^3 per candidate.

2.2 Question 2:

Solid copper (II) chloride ($CuCl_2$). Label it B and allow about 2 g per candidate.

2.3 Question 3:

Solid calcium carbonate ($CaCO_3$). Label it Z and allow 2 g per candidate.

These 24 Hours Advance Instructions consist of 2 printed pages.

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**3.0 NOTE TO EXAMINATIONS SUPERVISOR AND LABORATORY
TECHNICIAN OR 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 the experimental results together with the candidates' results (answer booklets) to the council.