

JOINT EVALUATION EXAMINATIONS
CHEMISTRY PAPER THREE CONFIDENTIAL

1. Provide each candidate with

- i. Exactly 5.0 g of impure anhydrous sodium carbonate in a stoppered container and label as solid X.
- ii. 100 cm³ of 2M hydrochloric acid labeled as solution Y.
- iii. About 100 cm³ of 0.4M sodium hydroxide
- iv. 5 g of maleic acid in a stoppered container labeled as solid L
- v. 1 burette
- vi. 1 pipette
- vii. 10ml measuring cylinder
- viii. Distilled in wash bottle
- ix. 6 test tubes
- x. 1 boiling tube
- xi. Red and blue litmus papers
- xii. 1 clamp and stand

2. In addition to the above reagents, candidates should access to:

- i. 1M acidified potassium chromate (vi)
- ii. 1M acidified potassium manganite (vii)
- iii. Bromine water
- iv. Methyl –orange indicator

3. Preparation of solutions

2 M HCl acid

- ✓ Dissolve 172cm³ of concentrated hydrochloric acid in enough distilled water and dilute to one litre

Bromine water

- ✓ Dissolve 10 cm³ of liquid bromine in 100cm³ of distilled water and store in a dark bottle.

Acidified potassium chromate (vi)

- ✓ Dissolve 25 g of potassium chromate (vi) in 200 cm³ of 2M Sulphuric (vi) acid and dilute to one litre solution

Acidified potassium manganite (vii)

- ✓ Dissolve 3.16 g of potassium manganite (vii) in 200 cm³ of 2 M Sulphuric (vi) acid and dilute to one litre.

Methyl orange

- ✓ Dissolve 2 g of methyl orange solid in a litre of dissolved water to form a solution. Filter the resulting mixture