

233/3

**CHEMISTRY PRACTICAL
CONFIDENTIAL INSTRUCTIONS TO SCHOOLS**

The following equipments and apparatus should be provided all candidates.

(a) In addition to the fittings and apparatus found in a chemistry laboratory, each candidate will require the following:

- About 120cm³ of solution **A**
- About 100cm³ of solution **B**
- One pipette, 25ml
- One burette, 0-50ml
- At least 2 conical flasks, 250ml
- A 100ml measuring cylinder
- A 10ml measuring cylinder
- Thermometer
- 250ml plastic beaker
- 100ml glass beaker
- About 120cm³ of solution **D**
- About 90cm³ of solution **E**
- 0.04g of solid **C**
- Stop watch
- About 2g of solid **G**
- About 2g of solid **H**
- Metallic spatula
- About 0.5g of sodium hydrogen carbonate solid
- Six dry test tubes
- One boiling tube
- One white plain paper

(b) Access to:

- Source of heat
- Distilled water
- Universal indicator solution and pH chart range 1-14
- Acidified KMnO₄ solution
- Pb (NO₃)₂ solution
- 2M sodium hydroxide
- 2M ammonia solution
- Phenolphthalein indicator

(c) Additional information

- Solution **A**-0.6M HCl acid
- Solution **B**-0.5M NaOH(aq)
- Solution **D**- Made by dissolving 40g of sodium thiosulphate per litre of solution.
- Solution **E**- 2M HCl(aq) acid
- Solid **C**- Magnesium ribbon
- Solid **G**- Aluminium sulphate
- Solid **H**- Maleic acid