233/3
CHEMISTRY
PAPER 3
(PRACTICAL)
JULY/AUGUST 2016
TIME: 2¼ HOURS

CONFIDENTIAL

KIRINYAGA CENTRAL SUB-COUNTY EFFECTIVE FORTY JOINT EXAMINATION – 2016

Each candidate will require:

- 30cm³ of solution A, Hydrochloric Acid.
- 100cm³ of solution C.
- 60cm³ of solution F, Sulphuric (VI) Acid (density – 1.84g/cm³)
- Solid G, 0.2g of magnesium powder.
- Stopwatch.
- Thermometer (-10 to 100ºC).
- 100ml beaker.
- Phenolphthalein indicator.
- Pipette.
- Pipette filler.
- 250ml volumetric flask.
- Distilled water.
- 2 labels.
- 250ml conical flask.
- Burette.
- White tile.
- Filter funnel.
- Stand and clamp.
- About 2.0g of solid H.
- About 0.2g of sodium hydrogen carbonate.
- 6 test tubes in a rack.

- Test tube holder.
- Metallic spatula.
- Boiling tube.
- Red and blue litmus paper.
- About 2.0g of solid J.
- 50ml or 100ml measuring cylinder.

ACCESS TO:

2M NaOH solution.
2M Ammonium hydroxide solution.
2M Barium nitrate solution.
2M Lead (II) nitrate solution.
Bunsen burner.
Acidified potassium dichromate (VI).
Acidified potassium manganate (VII).
2M Nitric (V) acid.

NOTE:

- Solution F is 0.5M sulphuric (VI) acid (density – 1.84g/cm^3).
- Solution C is made by dissolving 10g sodium hydroxide and 2g sodium nitrate in water to make 1 litre of solution.
- Solution A is 2M hydrochloric acid.
- Solid J is made by mixing hydrated zinc sulphate and ammonium sulphate in the ratio 1: 1.
- Solid H is 1.5g maleic acid.