233/3
CHEMISTRY
PAPER 3 (PRACTICAL)
Time: $2^1/_4$ hours

KCSE 2023 TOP PREDICTION MASTER CYCLE 9

CONFIDENTIAL INSTRUCTIONS TO SCHOOLS

In addition to the normal fittings and apparatus in the laboratory, each candidate would need the following:

- 150 mls of solution **H**
- 20 mls of solution **G**.
- 25 mls pipette
- 50 ml burette
- Pipette filler
- Thermometer (-10^0c – 110^0 c)
- Stop-watch
- At least six test-tubes
- Two boiling tubes
- Distilled water
- Five labels
- 2 conical flasks
- 10 ml measuring cylinder
- 50 ml measuring cylinder
- 10 cm^3 of solution **J**
- One filter paper
- 0.2g of solid **K**
- pH chart

Access to the following:-

(a) Source of heat
(b) Water bath
(c) 2M Nitric (V) Acid
(d) 2M Sodium Hydroxide
(e) 2M Ammonia solution
(f) 0.1M Potassium iodide
(g) 0.5M acidified Barium Nitrate (Acidified with Nitric (V) Acid)
(h) Bromine water
(i) Sodium hydrogen carbonate solid.
(j) Universal indicator solution.

Notes

- Solid **K** is maleic acid.
- Solution **J** is a mixture of Copper (II) Sulphate and Aluminium Sulphate. It is prepared by mixing two grams of each in water to make 20 $cm^3$of solution. (Prepare as per the number of candidates.)

- Solution **H** is prepared by dissolving 3.16 g of $KMnO_4$ and topping up to one litre.
- Solution **G** is prepared by mixing 5g of oxalic acid ad 2.86g of sodium oxalate and dissolve in one litre.

N/B

Subject teachers are required to do procedures I and II and complete table 1 and table II. They should submit these values together with the students' scripts.