

CHEMISTRY

Paper 3

KCSE TOP PREDICTION MASTER CYCLE 2

CONFIDENTIAL INSTRUCTIONS

In addition to the apparatus and reagents found in a Chemistry laboratory each candidate will require the following :

1. About 50cm³ of solution B
2. About 150cm³ of solution C
3. One pipette 25ml
4. One pipette filler
5. One burette 0 - 50ml
6. Two conical flasks - 250ml
7. One 10ml measuring cylinder
8. One 100ml measuring cylinder
9. 100ml empty beaker
10. 250ml volumetric flask
11. Six test tubes
12. One thermometer -10°C to 110°C
13. One boiling tube
14. About 500cm³ of distilled water supplied in a wash bottle
15. Two labels
16. About 1g of solid F in a stoppered container
17. About 0.2g of solid sodium hydrogen carbonate
18. One blue and one red litmus paper
19. About 6cm³ of liquid P
20. Test tube holder

Access solution

- 1) Acidified lead (II) nitrate supplied with a dropper.
- 2) Aqueous Barium (II) chloride supplied with a dropper.
- 3) Phenolphthalein supplied with a dropper.
- 4) Acidified potassium dichromate (VI) supplied with a dropper
- 5) Bunsen burner
- 6) Sodium hydroxide solution
- 7) Hydrogen peroxide

Solutions preparations

1. Solution C is prepared by dissolving 6.87cm³ of concentrated sulphuric (VI) acid in 200cm³ of distilled water and made up to 1000cm³ of solution with distilled water. Label this as solution C.
2. Solution B is prepared by dissolving 80g of NaOH in about 600cm³ of distilled water and diluting to one litre of solution. Label this as solution B.
3. Barium chloride is prepared by dissolving 30g of solid Barium chloride in about 600cm³ of distilled

- water and diluting to one litre of solution. Label this as aqueous barium nitrate.
4. Acidified potassium dichromate (VI) is prepared by dissolving 25g of potassium dichromate (VI) crystals in about 200cm³ of 2M sulphuric (VI) and diluting with distilled water to one litre of solution.
 5. Liquid P : Ethanol
 6. Solid F: iron (II) Sulphate