

# **KAPSABET HIGH SCHOOL**

**233/3 -**

**CHEMISTRY  
(PRACTICAL)**

**- Paper 3**

**CONFIDENTIAL**

The information contained in this paper is to enable the head of the school and the teacher in charge of chemistry to make adequate preparation for this year's chemistry practical examination. NO ONE ELSE should have access to this paper or acquire knowledge of its contents. Great care MUST be taken to ensure that the information herein does not reach the candidates- either directly or indirectly.

The teacher in charge of chemistry should NOT perform any of the experiments in the same room as the candidates nor make the results of the experiments available to the candidates or give any other information related to the experiments to the candidates. Doing so will constitute an examination irregularity which is punishable.

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

- A.
1. 100cm<sup>3</sup> of solution **A**
  2. 120cm<sup>3</sup> of solution **B**
  3. 75cm<sup>3</sup> of solution **C**
  4. One 250ml volumetric flask
  5. One pipette, 25.0ml and a pipette filler
  6. One burette 0 – 50ml
  7. 2 Labels
  8. 2 conical flasks
  9. One thermometer (-10<sup>0</sup>C – 110<sup>0</sup>C)
  10. One 10ml measuring cylinder
  11. One 100ml beaker
  12. 0.2g of Sodium hydrogen carbonate

13. 400cm<sup>3</sup> of distilled water
14. 0.5g of solid **H** in stoppered container
15. A clean metallic spatula
16. One boiling tube
17. Test-tube holder
18. 6 test-tubes in testtube rack
19. One filter funnel
20. 0.5g of solid G in stoppered container.

Access to

- B.
1. Bunsen burner
  2. Bromine water supplied with a dropper
  3. Methyl orange supplied with a dropper
  4. Acidified potassium dichromate (VI) supplied with a dropper
  5. 2M ammonia supplied with a dropper
  6. 2M Sodium hydroxide supplied with dropper
  7. 1M lead(II)nitrate supplied with a dropper
  8. 2M hydrochloric acid supplied with a dropper

NOTES:

1. Solution **A** is prepared by dissolving 79.30g of (oxalic) ethanedioic acid in 600cm<sup>3</sup> of distilled water and diluting it to one litre solution.

2. Solution **B** is prepared by dissolving 5.56g of potassium carbonate in 700cm<sup>3</sup> of distilled water and diluting it to one litre solution.
3. Solution **C** is prepared by dissolving 40g of sodium hydroxide pellets in 600cm<sup>3</sup> of distilled water and diluting it to one litre of solution
4. Acidified potassium dichromate (VI) is prepared by dissolving 25g of solid potassium chromate (VI) in about 600cm<sup>3</sup> of 2M sulphuric acid and diluting to one litre of solution.
5. Bromine water is prepared by diluting 1cm<sup>3</sup> of liquid bromine with 100cm<sup>3</sup> of distilled water in fume cup board.
6. Solid **H** is malleic acid.
7. solid **G** is Aluminium Sulphate