

TEACHER.CO.KE SERIES 20

**233/3
CHEMISTRY
PAPER 3
PRACTICALS**

CONFIDENTIAL INSTRUCTIONS TO SCHOOL

-The information contained in this paper is to enable the head of school and teacher in charge of chemistry to make adequate preparations for this year's chemistry mock 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 chemistry teacher is NOT expected to perform the experiments

- The apparatus required by each candidate for the chemistry mock practical examination are set out on the next page. It is expected that the ordinary apparatus of a chemistry laboratory will be available.

- The chemistry teacher should note that it is his/her responsibility to ensure that each apparatus acquired, for this examination agrees with specifications on the next page.

REQUIREMENTS FOR CANDIDATES

In addition to the apparatus and fillings found in the laboratory, each candidate will require the following;

1. About 200cm³ of solution A
2. About 150cm³ of solution B
3. 0.5g of solid C
4. One burette 0-50ml
5. One pipette 25.0ml
6. One pipette filler
7. One 250 volumetric flask
8. Two conical flask
9. 2-labels
10. About 1g of solid L
11. Six clean dry test tubes
12. Two boiling tubes
13. One 100ml measuring cylinder
14. One thermometer (mercury/alcohol) -10°C-110°C
15. One test tube holder
16. One clean metallic spatula
17. Two pieces of filter paper (Whatman No.1 125mm)
18. One 250ml empty beaker

19. One filter funnel
20. 4.0g of solid Q accurately weighed in a stoppered container
21. About 500ml of distilled water in a wash bottle
22. 10ml measuring cylinder
23. Bunsen burner
24. About 0.2 of sodium hydrogen carbonate in a petri dish
25. Stop watch/clock

Access to

1. Acidified Potassium dichromate supplied with a dropper
2. 2M hydrochloric acid supplied with a dropper
3. 2M aqueous ammonia supplied with a dropper

Preparations

1. Solution A is prepared by dissolving 25.8cm³ of concentrated hydrochloric acid (density 1.18g/cm³) in about 800cm³ of distilled water and diluting to a litre and labeled solution A
2. Solution B is prepared by dissolving 8.8g of sodium hydroxide pellets in about 600cm³ of distilled water and diluting to a litre and labeled solution B.
3. Acidified Potassium dichromate is prepared by dissolving 1.6g of Potassium dichromate in about 200cm³ of 2M sulphuric acid followed by 600cm³ of distilled water shaking to dissolve then diluting to the mark

NB

Solids C, Q and L will be supplied by the council

Provided by the council

Solid C

A mixture of anhydrous sodium carbonate and sodium chloride $0.4\text{g Na}_2\text{CO}_3 + 0.1\text{g NaCl}$

Each candidate 0.5g solid C

Solid Q

Oxalic acid

Each candidate 4g

Solid L

A mixture of zinc carbonate and oxalic acid in the ratio 2:1

Each candidate 1g