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## **CONFIDENTIAL**

## **INSTRUCTION TO SCHOOLS**

The information contained in this paper is to enable the head of the school and the teacher in charge of chemistry to make adequate preparations for this year's chemistry practical Joint 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. Chemistry teachers **SHOULD NOT** perform any of the experiments in the same room as the candidates or make the results of the experiments available to the candidates or give any other information related to the experiments. Doing so will constitute an examination irregularity which is punishable.

In addition to the equipment, apparatus and chemicals in an ordinary Laboratory, each candidate require:

- 1. About 100cm<sup>3</sup> of solution P.(0.1M HCl)
- 2. About 35cm<sup>3</sup> solution Q(1.0M NaOH)
- 3. Burette
- 4. Pipette
- 5. 1 Conical flask
- 6. Means of labelling
- 7. 250ml volumetric flask
- 8. White tile
- 9. 250ml plastic beaker
- 10. tissue paper
- 11. Thermometer (-10-110°c)
- 12. 50ml/100ml measuring cylinder
- 13. Distilled water



- 14. Rubber band
- 15. About 60cm<sup>3</sup> of solution C (2M HCl)
- 16. About 60cm<sup>3</sup> of solution D (2M NaOH)
- 17. Red and blue litmus papers
- 18. Wooden splint
- 19. About 1g solid U (a mixture of NH<sub>4</sub>cl and ZnCO<sub>3</sub> mixed in the ratio 1:1)
- 20. Filter paper
- 21. Filter funnel
- 22. Source of heat
- 23. Test tube holder
- 24. 4 clean dry test tubes
- 25. 10ml measuring cylinder

## **Access solutions**

- ❖ 2M NaOH (aq) supplied with a dropper
- ❖ 2M NH<sub>3 (aq)</sub> supplied with a dropper
- ❖ 2M Pb(NO)<sub>3(aq)</sub> supplied with a dropper
- ❖ 2M HNO<sub>3 (aq)</sub> supplied with a dropper
- Phenolphthalein indicator supplied with a dropper.