CONFIDENTIAL FOR CHEMISTRY PRACTICAL PAPER 233/3.



Each candidate should have:-

- 1. 80 cm³ solution A prepared by dissolving 4.0g of Sodium hydroxide in water made up to 1 litre
- 2. 100 cm³ of solution B which is 0.1M HCl
- 3. Phenolphthalein indicator
- 4. 2 conical flasks
- 5. 250ml volumetric flask
- 6. Burette
- 7. Pipette
- 8. White tile
- 9. Distilled water
- 10. 4.5 g of Oxalic acid solid C
- 11. 1 boiling tube
- 12. Thermometer
- 13. Filter funnel
- 14. Metallic spatula
- 15. 1g of solid X. (CuSO₄: PbCO₃ in ratios 2:1)
- 16. 6 clean test tubes
- 17. Test tube holder
- 18. 10ml measuring cylinder
- 19. Solid M. (Malleic acid)
- 20. Universal indicator and pH chart
- 21. Sodium Carbonate powder.

Access to:-

- \triangleright 2M Ba(NO₃)_{2(aq)}
- ➤ 2 M NaOH_(aq)
- ➤ 2M HCl_(aq)
- ➤ 2M HNO_{3(aq)}
- Source of heat
- ➤ Solution A = 0.07M hydrochloric acid
- Solid B = Calcium hydroxide Fresh powder
- ➤ Solid C = Oxalic acid
- \triangleright Solid X = CuSO₄ and PbCO₃ mixture in ratio 2:1
- ➤ Sold M = Malleic acid