Kenya Certificate of Secondary Education (K.C.S.E)



TEACHER.CO.KE SERIES 8

233/3

CHEMISTRY

PAPER 3.

JULY/ AUGUST

CONFIDENTIAL

- 1. 180cm³ of solution N HCl in a beaker.
- 2. 180cm³ of solution M 0.2M NaOH in a beaker.
- 3.. 50cm³ of solution D, 2M HCl in a beaker.
- 4. 100cm³ of solution B, 0.1M Na₂S₂O₃ in a beaker.
- 5. 10cm³ of 1M HNO₃ in a boiling tube.
- 6. Ethanol in a stopped container.
- 7. 5cm^3 of conc H_2SO_4 in a test tubewith a dropper.
- 8. Exact 1g of solid X which is F₂CO₃
- 9. About 1g of solid L in a dry stoppered container
- 10. About 1g of solid Q in a stoppered container access to:
- 11. Methy orange in a dropper
- 12. $0.5M \text{ Ca}(OH)_2$ in a dropper.
- 13. 1M $Pb(NO_3)_2$ in a dropper.
- 14. 2Ml NaOH solution in a dropper.
- 15. Distilled water in a wash bottle.
- 16. Acidified KMnO₄ in a dropper.
- 17. About 0.5g of Na₂CO₃ per student.
- 18. Pipette (25cm³)
- 19. Burette.
- 20. Pipette filler.
- 21. 3 conical flasks.(250cm³)
- 22. Stand and clamp.
- 23. White tile.
- 24. 100cm³ glass beaker.
- 25. Thermometer $(-10 \text{ to } 110^{0}\text{C})$
- 26. 10cm³ measuring cylinder.
- 27. 100cm³ measuring cylinder.
- 28. Stop watch/ clock.
- 29. Plain white paper.
- 30. 2 boiling tube.
- 31. 6 test tubes in a test tube rack.
- 32. A glass rod.
- 33. Metallic spatula.
- 34. source of heat.

N/B

1. solid X, Solid L and solid Q to be provided by the examining authority.



Preparation of solutions

Solution N is prepared by dissolving 68.8ml of concentrated Hydrochloric acid in 500ml of distilled then top up to 1litre of solution.

- 2. 1M HNO₃ is prepared by 66ml of conc. HNO₃ in 500ml of distilled water then top up to make 1litre of solution
- 3. Acidified KMNO₄ is prepared by dissolving 3.16g of KMnO₄ in $400cm^3$ of 2M H₂SO₄ then topped up to 1litre of solution by distilled H₂O.
- 4. 2M H₂SO₄ prepared by dissolving 110cm³ of conc. H₂SO₄ in 500ml of distilled H₂O then top to 1litre of solution.

