**SUNRISE ONE TERM 1 EXAMINATION -2023**

***Kenya certificate of Secondary Education***

***FORM 4***

**CHEMISTRY CONFIDENTIAL**

**A each candidate should have the following**

1. Solid A Measures exactly 2.0g of oxalic acid
2. Solution B 60 cm3 of 0.5m oxalic acid
3. Solution C -50cm3 of 0.25M sodium hydroxide solution
4. Solution D -100cm3 of 0.02M acidified KMnO4 solution
5. Burrette-50ml
6. 25 ml pipette
7. Pipette filler
8. 250 cm3 volumetric flask
9. 50ml measuring cylinders
10. Thermometer (-100C-1100C)
11. 2-conical flask
12. 100ml plastic beaker
13. Accessible to about 500cm3 of distilled water
14. Means of labeling
15. Solid G – 0.5g of oxalic acid
16. 10cm3 of solution F
17. A boiling tube
18. Test tube holder
19. The test tubes
20. 10cm3 measuring cylinder
21. Filter paper and filter funnel
22. Metallic spatula
23. Boiling tube

**B. Accessible to the following**

1. Source of heat.
2. 2M sodium hydroxide solution
3. 2M ammonia solution.
4. 2M Nitric (v) acid
5. 0.5M Barium chloride solution
6. Universal indicator paper and a chart

**N/B**

* All the bench solutions supplied with a dropper
* Solution F is a mixture of Al2 (SO4)3 and Cu(No3)2 in the ratio of 1.1
* O.5M oxalic acid is prepared by dissolving 63g in distilled water and making it to one litre
* 0.25M NaOH is prepared by dissolving 10g of sodium hydroxide in water and making it to one litre
* 0.02M acidified KMnO4 Dissolve 3.2g of KM nO4  crystals in about 500cm3 of water then acidify with about 400cm3 of 1M H2SO4 and make up to a litre
* 2M NH4OH Measuring 112 cm3 of Ammonium solution make it up to a litre
* 0.5M Barium Chloride,Dissolve 104g in a little water then make up to 1 litre
* 2M HN03Dissolve 125cm3 of conc.HN03 acid in a little water and then make it a litre