**Term 1 – 2023 OPENER EXAM**

**CHEMISTRY**

**PAPER 3 (233/3)**

**FORM FOUR (4)**

**Time: 2 ¼ Hours**

**CONFIDENTIAL REPORT**

***Each candidate should be provided with the following:***

1. ***Burette***
2. ***Pipette***
3. ***Three conical flasks***
4. ***Funnel***
5. ***One label***
6. ***Phenolphthalein indicator***
7. ***Solution P 120cm3***
8. ***Solution R 100cm3***
9. ***Distilled water in a wash bottle***
10. ***8 test tubes***
11. ***100 ml plastic measuring cylinder***
12. ***10 ml plastic measuring cylinder***
13. ***One boiling tube***
14. ***Solid T , solid Q and solid V***
15. ***Means of heating***
16. ***Bench solution of 2M nitric (V) acid***
17. ***Bench solution 2M NaOH***
18. ***Bench solution 0.1M Ba(NO3)2***
19. ***Bench solution 0.1M Pb(NO3)2***
20. ***Bench solution 2M NH3(aq)***
21. ***Metallic spatula***
22. ***Glass rod***

***Notes on preparation of solutions:***

* + ***Solution P = 0.2M HCl***
  + ***Solution R = 4.0 g/l sodium hydroxide***
  + ***Solid V = ½ spatula full of sodium sulphite***
  + ***Solid T = ½ spatula full of CuSO4***
  + **Solid Q = EXACTLY 0.5 g *CaCO3***