**CHEMISTRY CONFIDENTIAL**

**FORM 4**

**END TERM 2 2024**

In addition to the common apparatus and fittings found in a Chemistry laboratory,

each candidate should be provided with;

1. About 150cm3 of solution Z Labelled **Solution Z.**
2. About 100cm3 of solution R labelled **Solution R.**
3. One 10.0ml measuring cylinder.
4. One 50.0 ml measuring cylinder.
5. One 100.0ml plastic beaker.
6. One thermometer -100C to 1100C.
7. One clean metallic spatula
8. Six clean dry test tubes in a test tube rack.
9. 2 boiling tubes
10. Solid V ( about 7cm Magnesium ribbon)
11. A burette
12. Wash bottle with distilled water
13. 0.5g of solid M – Pb(NO3)2
14. 0.1g of solid P – maleic acid
15. 0.5g of solid N – Na2CO3
16. Filter funnel
17. Stop watch/ clock
18. A 30cm ruler

**ACCES TO:**

1. 2M sodium hydroxide supplied with a dropper.
2. 2M ammonia solution supplied with a dropper.
3. 0.5 M potassium iodide/KI supplied with a dropper.
4. 2M sulphuric (vi) acid supplied with a dropper.
5. Acidified potassium manganate (VII) solution supplied with a dropper.
6. Universal indicator paper/ solution
7. pH chart 1-14

**PREPARATIONS.**

1.Solution Z is prepared by taking 172.0cm3 of concentrated hydrochloric acid ( density 1.18g/cm3) and adding it to 600cm3 of distilled water in a 1 litre volumetric flask and diluting it to the mark.

2.Solution R is prepared by dissolving 80.0g of sodium hydroxide pellets in 800cm3 of distilled water in a 1 litre volumetric flask and then diluting it to the mark.

3. KMnO4 is prepared by dissolving 3.16g of the solid in a about 500 cm3 of 2M H2SO4 and diluting to one litre of solution .

4. 2M H2SO4 is prepared by adding 55 cm3 of conc H2SO4 in about 600cm3 of distilled water and making it to 1 litre of solution.

5. NaOH is made by dissolving 80g of NaOH in about 700cm3 of distilled water and making it to 1 litre.