**FORM 3 CHEMISTRY PAPER 3**

**CONFIDENTIAL 2023**

***Each candidate will require the following***

1. About 150cm3 solution H
2. About 100cm3 solution X
3. About 100cm3 solution N
4. About 40cm3 1M sulphuric (VI) acid
5. About 1.0g solid Y
6. About 1.2g solid F
7. One 10ml measuring cylinder
8. One burette
9. One 25ml pipette and pipette filler
10. Two conical flasks
11. Two boiling tubes
12. Four test tubes
13. Glass rod
14. Distilled water

***Candidates should have access to the following***

1. 2M potassium chloride solution
2. 2M calcium chloride solution
3. 2M Sodium hydroxide solution

Supply with droppers

1. 2M sodium chloride solution
2. 2M ammonia solution
3. Bromine water
4. Acidified potassium manganate (VII) solution
5. Universal indicator solution
6. PH chart
7. Burner

***NB****:* Supply solution 3, 4, 5, 6, 7 and 8 with droppers.

***NOTES***

1. Solution H is prepared by weighing accurately 1.3g of potassium manganite (VII), dissolve in about 400cm3 of distilled water and make the solution to 1 litre. The solution should be prepared one day before the practical is taken.
2. Solution N is prepared by dissolving 7.8g of ammonium iron (II) sulphate in 400cm3 of 1M sulphuric (VI) acid and diluting the solution with distilled water to make 1 litre solution.
3. Solution X is prepared by measuring accurately 5cm3 of fresh sample of 20 volume hydrogen peroxide, then dilute it with distilled water to make one litre solution.
4. 1M sulphuric (VI0 acid is prepared by measuring accurately 55cm3 of concentrated sulphuric (VI) acid, pour carefully into a beaker containing 400cm3 of distilled water then top up with more distilled water to make 1 litre solution.
5. Solid Y is prepared by mixing equal amounts of aluminium chloride and potassium chloride thoroughly.
6. Solid F is maleic acid.