****

**CHEMISTRY**

**FORM FOUR PAPER 3 (233/3)**

**TRIAL 2, 2019**

**INSTRUCTIONS TO SCHOOL**

**(CONFIDENTIAL)**

In addition to the equipment and fittings found in a chemistry laboratory. Each candidate should be provided with;

1. Solid A 5.0g measured accurately
2. About 80cm3 of solution B
3. About 0.5g solid C
4. About 10cm3 of liquid D
5. A thermometer (-10-1100C)
6. A burette
7. A complete retort stand
8. A pipette and a pipette filler
9. 2 conical flasks
10. A 250ml volumetric flask
11. One boiling tube
12. Five (5) test tubes
13. 0.5g sodium hydrogen carbonate
14. Two labels

**ACCESS TO:**

1. Means of heating (Tripond stand and wire gauze)
2. Sodium sulphate solution (NaSO4)
3. Ammonia solution 2m
4. 2m Sodium Hydroxide
5. Lead Nitrate solution
6. Barium Nitrate solution
7. Acidified potassium manganite (VII) solution
8. Bromine water
9. Acidified potassium dichromate(VI) solution

**NB:**i) Solid A is 5.0g of oxalic acid (COOH)2 2H2O

ii) Solution B is Kmno4

iii) Solid C is magnesium chloride MgCl2

iv) Liquid D is absolute ethanol

**Preparations**

1. Solution B is made by dissolving 20g of solid Kmno4 in 200cm3 of 2.0m H2SO4 and toping to 1000cm3 by distilled water.
2. Sodium Hydroxide is prepared by dissolving 80g of NaOH pellets in 600cm3 of distilled water and top to 1000cm3 with distilled water.
3. Ammonia solution is prepared by dissolving 150ml of conc ammonia to 600cm3 of distilled water then top to the mark.
4. Barium Nitrate is prepared by dissolving 26g of solid Barium Nitrate in 600cm3 of water then topping to 1000cm3 with distilled water.
5. Lead nitrate is prepared by dissolving 30g of solid Lead Nitrate in 600cm3 of water then topping to 1000cm3 with distilled water.
6. Sodium Sulphate is prepared by dissolving 14.2g of solid sodium sulphate in 600cm3 of distilled water then topping up to 1000cm3 with distilled water.
7. Acidified Kmno4 is prepared by dissolving 3.2g of solid Kmno4 in 200cm3 of 2.0m H2SO4 acid then topping with distilled water to 1000cm3.
8. Acidified K2Cr2O7 is prepared by dissolving 25g of solid K2Cr2O7 in 200cm3 of 2.0m H2SO4 then topping to 1000cm3 with distilled water.