# SULIMO JOINT EXAMINATION

## CHEMISTRY
## PAPER 3
## CONFIDENTIAL



**(a) Each student should be supplied with the following**

1. Burette
2. Pipette
3. Pipette filler
4. Filter funnel
5. White tile
6. Clamp and stand
7. **2** conical flasks
8. **100 $cm^3$**glass Beaker (empty)
9. Stopwatch
10. 1 glass rod
11. **100$cm^3$** measuring cylinder
12. **10$cm^3$**measuring cylinder
13. **250 $cm^3$**volumetric flask
14. Metallic spatula
15. **6** clean test tubes
16. Test tube holder
17. **500ml** distilled water
18. White piece of paper or filter paper
19. **1** filter paper
20. **1** labelling paper
21. Phenolphthalein indicator
22. About **90$cm^3$** solution **K**
23. About **100$cm^3$** solution **L**
24. About **70$cm^3$** solution **N**
25. About **90$cm^3$** solution **P**
26. About **0.5g$NaHCO_3$**
27. About **1.0g** solid **Q**
28. About **0.5g** solid **R**

**(b) Each student should have access to the following solutions:**

1. Mean of heating
2. 2M NaOH
3. 2M $HNO_3$
4. $Pb(NO_3)$
5. Acidified $KMNO_4$
6. Potassium iodide solution

**NB: the above solutions should be supplied with a dropper each.**

## (c) SOLUTIONS PREPARATION AND SOLID MEASUREMENTS

1. Solution **K** is **1M $H_2SO_4$**
2. Solution **L** is **0.36 M NaOH** containing **14.4g** of **NaOH** in **1 litre** of the solution
3. SolutionN is **2 M HCl**
4. Solution P is **0.16 M $Na_2S_2O_3$(*sodium thiosulphate*)**
5. Solid Q is a mixture 1g of sodium sulphite(**$Na_2SO_3$)** and lead (II) carbonate (**$PbCO_3$)** mixed in the **ratio 1:1 (*should be thoroughly mixed*)**
6. Solid **R** is maleic acid