MURANG'A SOUTH MULTIILATERAL EXAM

233/3 CHEMISTRY Confidential 2017

Confidential instructions

In addition to the fittings and apparatus found in a chemistry laboratory each candidate should have :

1.Solution B about 150 cm^3
2.About 60 $cm^3$of solution A.
3.About 80$cm^3$of solution C
4. Burette 50ml
5.Filter funnel
6.25 cm^3 pipette
7.Clamp and stand
8.White tile
9.2 CONICAL FLASKS
10.10ml measuring CYLINDER
11.6 TEST TUBES
12.Boiling tube
13.Distilled water
14,Thermometer
15.A stop watch
16.About 19 solid L
17.About 1.5g of solid L
18.Metallic spatula
19.About 1g of sodium hydrogen carbonate
20.Water bath
21.Pipette filter

Access to
1.Phenolphthalein indicator
2.Source of heat
3. 2M $Pb(NO_3)_2$ (aq)
4.2M HNO_3 (aq)
5.0.5M $Ba(NO_3)_2$ (aq)
6.2M Ammonia solution
7.2M NaOH

8.Acidified $KMnO_4$ solution
9. 2M HCl (aq)
10. Acidified $K_2CV_2O_7$ solution

NOTES

1. Solution B is 0.05M oxalic acid
2. Solution A is 0.01M potassium manganite (VII) solution.
3. Solution C is 0.1M sodium hydroxide solution .
4. Water bath prepared by placing about 200 $cm^3$of water in a 250ml beaker .
5. Solid Q mixture $(NH_4)_2SO_4$ and $AL_2(SO_4)_3$ in the ratio 1: 1
6. Solid L is maleic acid crystal.
7. Acidified $K_2Cr_2O_7$ is prepared by dissolving 25g of solid potassium dichromate(iv) in
   About 600 cm^3 of 2MH_2SO_4 acid and diluting to one litre of solution.
8. Acidified $KMnO_4$ is made by dissolving 3.169 of the solid $KMnO_4$ in about 500 cm^3 of 2M H_2S0_4 acid and and diluting to one litre of solution.