BUKAKA CLUSTER EXAMINATIONS

Kenya Certificate of Secondary Education.(K.C.S.E)

233/3 CHEMISTRY PRACTICAL

END OF TERM 1, 2025

FORM 4

CONFIDENTIAL INSTRUCTIONS

The information contained in this paper is to enable the head of the school and the teacher in-charge of Chemistry to make adequate preparations for the Chemistry Practical.

In addition to the laboratory fittings each candidate requires the following:

1. 6.0g of Solid M in a boiling tube (weighed accurately and stoppered)
2. Solution N 100 cm^3
3. White tile
4. Burette
5. 25ml pipette
6. 2 conical flasks
7. Retort stand
8. Filter funnel
9. Pipette filler
10. 100ml of distilled water
11. Thermometer (-10 to 110 ^0C)
12. Test-tube holder
13. 2 empty boiling tube
14. 5 test tubes in a test tube rack
15. Metallic spatula
16. Universal indicator paper with its Universal PH chart
17. About 500cm^3 distilled water in wash bottle
18. One 250ml volumetric flask
19. 10ml measuring cylinder
20. One blue and one red litmus papers
21. A piece of aluminium foil 2cm by 2cm
22. One clean glass rod
23. One label
25. About 2g solid F
26. About 0.5g barium chloride
27. About 0.5g calcium chloride
28. About 2g solid G
29 cold water in a 250mL beaker

EACH CANDIDATE HAS ACCESS TO:

- 2M NaOH supplied with dropper
- 0.1M Lead (II) nitrate supplied with dropper
- Acidified $KMnO_4$ supplied with dropper
- Source of heat
- Hot Water bath
- Phenolphthalein indicator supplied with dropper

NOTES AND PREPARATION OF SOLUTIONS

1. **Solids:**

Solid **M** is oxalic acid weighed accurately and supplied in a stoppered container/boiling tube

Solid G is sodium nitrate

Solid F is maleic acid

PREPARATION OF SOLUTIONS

1.Solution N

Solution N (0.2M) is prepared by dissolving 8g of sodium hydroxide pellets in 400cm^3 of distilled water and make it to 1 litre

2,2M NaOH

Prepared by dissolving 80.0g of sodium hydroxide pellets in 400cm^3 of distilled water and make it to 1 litre

3.Acidified potassium manganate (VII)

Prepared by dissolving 3.16g in 400cm^3 of 2M sulphuric (VI) acid and add water up to 1000cm^3 of solution.

4.0.1M lead nitrate solution

Prepared by dissolving 33.1g in about 400cm3 and add distilled water up to 1litre of solution