MARANDA HIGH SCHOOL

Kenya Certificate of Secondary Education

MOCK 2025 EXAMINATION

233/3 CHEMISTRY CONFIDENTIAL PAPER 3

In addition to the apparatus and fittings found in the laboratory, each candidate will require the following:

1. One burette – 0–50 ml
2. One pipette – 25.0 ml
3. Three 250 ml Conical Flask
4. One 100 ml beaker
5. About 500 ml of distilled water
6. One filter funnel
7. One spatula
8. One 10 ml measuring cylinder
9. About 50 cm^3 of 2M sulphuric (VI) acid
10. Solution M, about 150 cm^3
11. Solution N, about 120 cm^3
12. Solution P, about 50 cm^3
13. Solution Q, about 60 cm^3
14. Six test tubes in a rack
15. Two boiling tubes
16. Eight labels
17. White tile
18. 50 cm^3 of potassium iodide solution
19. One stopwatch

20. About 0.5 g of solid R

21. About 0.5 g of solid S

22. 0.5 g of solid sodium carbonate

23. One clean glass rod

Access to

✓ 2M aqueous sodium hydroxide

✓ Aqueous sodium sulphate

✓ Aqueous Barium chloride

✓ Aqueous Lead (II) nitrate

✓ Bromine water

✓ Acidified potassium dichromate (VI)

Preparations:

1. Solution M is prepared by dissolving 1.20 g of solid M (Potassium Iodate) in about 600 cm^3 of distilled water and diluting to one litre of solution. Label this as solution M.

2. Solution N is prepared by dissolving 12.4 g of solid sodium thiosulphate in 800 cm^3 of distilled water and diluting to one litre of solution. Label this as solution N.

3. Solution P is prepared by dissolving 0.40 g of solid P (Na_2HO_3) in about 800 cm^3 of distilled water and diluting to one litre of solution. Label this as solution P.

4. Potassium iodide is prepared by dissolving 5.0 g of solid potassium iodide in about 800 cm^3 of distilled water and diluting to one litre of solution. Label this as Potassium Iodide.

5. Solution Q is prepared by placing 10.0 g of solid Q (starch) in 1000 cm^3 of distilled water. Heat the mixture to boiling and allow to cool to room temperature. Label this as solution Q.

6. Solid R - Calcium chloride

7. Solid S -Maleic acid