

MUMIAS WEST JOINT EVALUATION -2022

233/3 CHEMISTRY PAPER 3 PRACTICALS

CONFIDENTIAL INSTRUCTIONS TO SCHOOLS

- The information contained in this paper is to enable the head of school and teacher in charge of Chemistry to make adequate preparations for this year's chemistry JOINT practical examination. NO ONE ELSE should have access to this paper or acquire knowledge of its contents. Great care must be taken to ensure that the information herein does not reach the candidates either directly or indirectly.
- The chemistry teacher is NOT expected to perform the experiments
- The apparatus required by each candidate for the chemistry mock practical examination are set out on the next page. It is expected that the ordinary apparatus of a chemistry laboratory will be available.
- The chemistry teacher should note that it is his/her responsibility to ensure that each apparatus acquired, for this examination agrees with specifications on the next page.

In addition to the apparatus and fitting in a chemistry laboratory each candidate will require the following.

1. **4.5 g solid P** in a boiling tube (weighed accurately)
2. About **100cm³** solution **Q**
3. 1 label
4. One burette
5. One pipette
6. Two conical flasks (250ml)
7. Pipette filler
8. Filter funnel
9. 250ml volumetric flask
10. 10ml measuring cylinder
11. One boiling tube
12. Thermometer (-10⁰c to 110⁰c
13. Distilled water in a wash bottle
14. **1g solid A** in a stoppered container
15. **1g solid B** in a stoppered container
16. One metallic spatula
17. Test tube holder
18. **1g sodium hydrogen carbonate** in a stoppered container
19. Six empty clean test tubes

Access to

- Phenolphthalein indicator supplied with a dropper
- Bunsen burner
- Acidified potassium manganate (VII) supplied with a dropper
- Acidified potassium dichromate (VI) supplied with a dropper
- 2M sodium hydroxide supplied with a dropper
- 2M aqueous ammonia supplied with a dropper
- Barium nitrate solution supplied with a dropper
- 2M nitric (V) acid supplied with a dropper
- 0.1M sodium chloride solution supplied with a dropper
- Water bath

Notes.

- 1. Solid P is oxalic acid $(\text{COOH})_2 \cdot 2\text{H}_2\text{O}$**
- 2. 0.2M Sodium hydroxide solution labeled Q**
- 3. Solid A – Aluminium sulphate**
- 4. Solid B - oxalic acid**