MOMALICHE SCHOOLS

233/3 CHEMISTRY PRACTICAL SEPTEMBER 2021 CONFIDENTIAL INSTRUCTIONS TO SCHOOLS

The following equipments and apparatus should be provided all candidates. (a) In addition to the fittings and apparatus found in a chemistry laboratory, each candidate will require the following:

- About 120cm³ of solution A
 About 100cm³ of solution B
- One pipette, 25ml
- One burette, 0-50ml
- At least 2 conical flasks, 250ml
- A 100ml measuring cylinder
- A 10ml measuring cylinder
- Thermometer
- 250ml plastic beaker
- 100ml glass beaker
- About 120cm³ of solution D
- About 90cm³ of solution E
- 0.1g of solid C
- Stop watch
- About 2g of solid G
- About 2g of solid H
- Metallic spatula
- About 0.5g of sodium hydrogen carbonate solid
- Six dry test tubes
- One boiling tube
- One white plain paper, to mark an X on

(b) Access to:

- Source of heat
- Distilled water
- Universal indicator paper and pH chart range 1-14
- Acidified KMnO₄ solution ,dissolve 3.2g KMnO₄ in 400ml of 2M H₂SO₄ and dilute to 1L
- Pb (NO₃)₂ solution,
- 2M sodium hydroxide
- 2M ammonia solution
- Phenolphthalein indicator

(c) Additional information

- Solution A-0.6M HCl acid
- Solution **B**-0.4M NaOH(ag)
- Solution D- Made by dissolving 40g of sodium thiosulphate per litre of solution.
- Solution E- 2M HCl(ag) acid
- Solid C- Magnesium granules or powder
- Solid **G** Aluminium sulphate
- Solid H- Maleic acid
- Dilute HNO₃ 2M