

233/1

CHEMISTRY

CONFIDENTIAL*Provide each candidate with*

- About 3g of Solid S₁ (Sodium ethanedioate)
- About 80cm³ of solution S₂ (0.02M potassium Manganate VII)
- About 80cm³ of solution S₃ (1.0 M H₂SO₄ acid)
- Two 100ml/beakers
- One 100 ml / measuring cylinder
- One burette 0 – 50ml
- One pipette 25ml and pipette filler
- One thermometer 110°C
- Six dry test tubes and one test tube holder
- 4 labels
- Source of heat
- Distilled water plenty
- Full range pH paper (Universal Indicator paper)
- Bromine water
- Metallic Spatula
- One 250cm³ volumetric flask
- Three dry conical flasks
- Two filter papers
- Acid Potassium dichromate (VI)
- Acidified potassium Manganate
- Concentrated Sulphuric Acid
- A glass rod
- About 4 droppers
- Sodium Hydrogen Carbonate.

NOTES

1. Solution S₂ – 0.02M Potassium Manganate.
2. Solution S₃ – 1.0M Sulphuric acid
3. Solid S₁ – Sodium ethanedioate 3g
4. Liquid U – Ethanol
5. Oxalic Acid – 4.5g