233/3 KASSUJET 2021 CONFIDENTIAL

Apart from the usual laboratory fittings, each student should have the following;

- 1. About 0.5g of Solid Q in a stoppered container
- 2. About 0.5g of Solid R in a stoppered container
- 3. 100cm^3 of solution R
- 4. 100 cm^3 of solution Q
- 5. 100 cm^3 of solution P
- 6. Distilled water.
- 7. About a spatula end-full of solid Calcium hydroxide
- 8. Red litmus paper
- 9. Three 250ml conical flasks
- 10. One burette 0 50ml
- 11. One pipette 25ml
- 12. One 50ml measuring cylinder
- 13. One 10ml measuring cylinder
- 14. One 250cm³ volumetric flask
- 15. Phenolphthalein indicator
- 16. Labels (2)
- 17. Stop watch
- 18. Two boiling tubes
- 19. One metallic spatula
- 20. Five test tubes on a test-tube rack
- 21. Wooden splint
- 22. Test tube holder

The student should also get access to;

- 1. 10% Hydrogen peroxide (freshly prepared + dropper).
- 2. 2M Barium nitrate solution + dropper.
- 3. 0.5M Hydrochloric acid + dropper.
- 4. Source of heat.
- 5. Sodium hydrogen carbonate
- 6. Acidified Potassium manganate (VII)
- 7. Acidified Potassium dichromate (VI)

NOTES

Solid Q is Hydrated ferrous ammonium sulphate.

Solid R is Malleic acid

Solution R is prepared by weighing exactly 4.8g of sodium carbonate dissolve it to make 1dm³ of solution.

Solution Q is prepared by weighing exactly 172cm³ of hydrochloric acid (35-37% sp.gr 1.18) and dissolving to make 1dm³ of solution.

Solution P is prepared by weighing exactly 37.2g of sodium thiosulphate pentahydrate and dissolving to make 1dm³ of solution.