

# 233/3 CHEMISTRY PRACTICALS MOMALICHE 4 CYCLE 8 JOINT EXAMINATION TESTS, DECEMBER, 2021 CONFIDENTIAL REQUIREMENTS

A part from the usual laboratory apparatus, each candidate should have the following:-

### A)

- 1. 50 ml burette
- 2. 25 ml pipette
- 3. 3 conical flasks
- 4. A metallic spatula
- 5. 15 cm ruler
- 6. A scalpel blade
- 7. 2 boiling tubes
- 8. 7 clean test tubes
- 9. 500 ml distilled in a wash bottle
- 10. 100 ml glass beaker
- 11. Stop-watch
- 12. 100 ml measuring cylinder
- 13. 13 cm of solid M
- 14. 80 cm<sup>3</sup> of solution N
- 15. 100 cm<sup>3</sup> of solution S
- 16. A label
- 17. About 1.0 g of solid T
- 18. About 1.5g of solid U
- 19. About 1.0 g sodium hydrogen carbonate
- 20. One red and one blue pieces of litmus papers

## B)

## Access to:

- 21. A Bunsen flame
- 22. 2 M sodium hydroxide solution
- 23.2 M Ammonia solution
- 24. Acidified potassium manganate (VII) solution
- Supplied with a dropper

- 25. Phenolphthalein indicator
- 26. 0.5 M barium nitrate solution
- 27. 2.0 M nitric acid

## **NOTES:**

- 1. Solution N is 1.5 M hydrochloric acid
- 2. Solution S is 0.4 M sodium hydroxide solution
- 3. Solid M is magnesium ribbon
- 4. Solid T is zinc sulphate
- 5. Solid U is maleic acid