BIOLOGY 9744/04

Paper 4 Practical 2 September 2021

Checklist for students

Question 1

- 1. A 10% and a 1% betalain solution
- 2. Three cores of raw (uncooked) beetroot tissue with a minimum length of 3 cm
- 3. A capped bottle labelled **100% alcohol**, flammable
- 4. 200 cm³ distilled water in a capped plastic vial labelled **distilled water**
- 5. 250 cm³ beaker labelled **tap water** (also used in Q2)
- 6. Plastic ruler (also used in Q2)
- 7. 12 test-tubes (also used in Q2)
- 8. Rack or racks to contain at least 12 testtubes (also used in Q2)
- 9. Six plastic vials with caps (at least 10 cm³ capacity)
- 10. Three 10 cm³ syringes
- 11. Two 1 cm³ syringes
- 12. A piece of plain white card, approximately 10 cm × 10 cm
- 13. Eight paper towels
- 14. Scalpel
- 15. White tile
- 16. Blunt forceps
- 17. Stirring rod
- 18. Marker pen
- 19. Stopwatch
- 20. Beaker for waste, labelled waste
- 21. Protective gloves
- 22. Eye protection

Question 2

Each candidate will have sole, uninterrupted use of a microscope for 1 hour 15 minutes only.

- 1. Microscope
- 2. TTI slide
- 3. 15 cm³ of plant extract labelled **C** (in plastic vial)
- 4. 15 cm³ each of **4.0**, **2.0**, **1.0**, **0.5** mgcm⁻³ ascorbic acid solutions (in plastic vials)
- 5. 25 cm³ of DCPIP (in plastic vial)
- 6. 250 cm³ beaker labelled **tap water** (also used in Q1)
- 7. Plastic ruler (also used in Q1)
- 8. Five test tubes (also used in Q1)
- 9. test-tube rack(s) (also used in Q1)
- 10. Six 5 cm³ syringes
- 11. Sticky labels
- 12. Paper towel