

051106T4APB

APPLIED BIOLOGY LEVEL 6

APB/OS/AB/CR/01/6/A

Carry out Cytological and Histological Techniques

March/April 2025



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

PRACTICE

INSTRUCTIONS TO CANDIDATE:

1. You are required to perform the following tasks:

Task 1: Observe Mitosis in Onion Root Tip.

Task 2: Investigate the Effects of Different Osmotic Solutions on Plant Cells.

- Prepare TWO solutions: 10% NaCl and 30% sucrose solution.
- Use distilled water as a control.
- Mount the set up on a slide and observe under a microscope.
- Draw the observations.

2. You have been provided with the following resources for the practical tasks:

- Onion with roots
- Microscope
- Glass slides and coverslips

- Droppers
- Acetic acid
- Watch glass
- Beaker
- Scalpel blade
- Pair of forceps
- Staining rack
- Distilled water
- Bunsen burner
- Elodea leaves
- Sodium chloride (NaCl)
- Sucrose solution
- Petri dish
- Staining solution: acetocarmine or ue
- Disposable gloves