

071106T4SLT

SCIENCE LABORATORY TECHNOLOGY LEVEL 6

SLT/OS/SL/CR/02/6

Apply Physics Techniques

July/August 2025



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

PRACTICAL ASSESSMENT

Time: 2 Hours

INSTRUCTIONS TO CANDIDATE

1. In this practical assessment you are required to carry out the following task:

Determine the specific heat capacity of metal block M using method of mixtures given that

- ✓ Specific heat capacity of copper = 400 J/kg.K
- ✓ Specific heat capacity of water 4200 J/kg.K

2. You are provided with the following resources to carry out the task:

- Metal block M
- 30cm cotton twine thread
- 100ml beaker
- Lighter
- Water
- Tripod stand
- Heat source
- Well-lagged copper calorimeter
- Thermometer
- Piece of cardboard
- Wire gauze