

073106T4LAS

LAND SURVEY LEVEL 6

LSM/OS/LS/CR/01/6/A

Conduct Topographical Survey

Nov/Dec 2024



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

PRACTICE ASSESSMENT

TIME: 6 HOURS

INSTRUCTIONS TO CANDIDATE

1. You are required to demonstrate how to pick details using a Total Station and produce a topographical map using a suitable software by performing the following tasks:
 - (i) Choose a suitable area and mark two points A and B 20 m apart using pegs.
 - (ii) Pick the coordinates of the two points including their elevations using a Handheld GPS receiver. Then compute the bearing of the line AB
 - (iii) Set up a Total Station at point A and orient the instrument to point B. Then within the site pick coordinates of at least 10 features comprising of points, linear, polygon and spot heights.
 - (iv) Download the data from the instrument and draw a topographical map from the features picked using a suitable software then save in a specific folder in PDF format.

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

- Total station with all its accessories
- Handheld GPS receiver
- Pegs
- Fools caps
- A Computer installed with AutoCAD or ArcMap or QGIS or ArcGISpro
- Tape (30m, 50m or 100m)
- Hammer/Mallet
- Scale Ruler (metric)

3. You are required to have two non-candidate assistants