

073105T4LAS

LAND SURVEY AND MAPPING LEVEL 5

LSM/OS/LM/CR/01/5/A

Conduct Topographical Survey

Nov/Dec 2024



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

PRACTICE

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INSTRUCTIONS TO CANDIDATE:

1. You are required to perform the following tasks:
 - i. Identify a suitable site and mark two intervisible points A and B 25 meters apart on the ground
 - ii. Measure and record the coordinates of the marked points A and B by use of a handheld GPS receiver
 - iii. Calculate the join between the two points A and B
 - iv. Set up the total station at point A and orient it to B
 - v. Make and record observations to at least 14 points within the site forming point, linear and polygon features
 - vi. Enter the details obtained in task (v) into an excel worksheet and import them into ArcGIS/AutoCAD software

- vii. Display the detail points on the software and digitize them to form linear, point and polygon features as they appeared on the ground
 - viii. Prepare and print out a topographical map of the site in an A4 size paper.
2. You have been provided with the following resources for the practical tasks:
- A Handheld GPS Receiver.
 - A Total Station with its accessories.
 - A Computer installed with Microsoft Office and ArcGIS/AutoCAD software.
 - Printing papers (A4 size).
 - Pegs.
 - 50 m steel tape.
 - Mallet.
 - Writing materials (foolscaps).
 - Scientific Calculator.