

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)**

PRACT MENT

OBSER CKLIST

Candidate's Name & Registration Code			
Assessors Name & Registration Code			
Venue of Assessment			
Date of Assessment			
Items to be Evaluated: <i>Please award marks as appropriate. Give a brief comment on your observation.</i>	Marks Available	Marks Obtained	Comments
TASK 1:			
1. Identified and used PPEs appropriately. • Apron/dust coat; • Boots/Closed shoes. <i>(Award 1 mark each)</i>	2		
Sub-Total 1	2		

TASK 2:			
2. Identified a suitable site.			
Correctly selected a suitable undulating site with point, linear and polygon features;	2		
Correctly identified and marked two intervisible points A and B 25 meters apart on the site.	2		
(Award marks as indicated = 4 marks)			
Sub-Total 2	4		
TASK 3:			
3. Measured and recorded the coordinates of points A and B.			
Correctly configured the Handheld GPS receiver;	2		
Correctly measured and record coordinates of the two points.	2		
(Award marks as indicated = 4)			
Sub-Total 3	4		
TASK 4:			
4. Calculated the join between the two points A and B.			
Correctly computed the change in eastings and change in northings using the coordinates of the two points;	2		
Correctly computed the distance and bearing (join).	2		
(Award marks as indicated = 4 marks)			
Sub-Total 4	4		
TASK 5:			
5. Set a total station at A and oriented it to B.			

• <i>Correctly mounted a tripod stand over point A;</i> • <i>Correctly levelled and centered the total station over the point with use of a plumb bob;</i> • <i>Correctly oriented the instrument to point B.</i> <i>(Award marks as indicated = 7 marks)</i>	2		
	2		
	3		
Sub-Total 5	7		
TASK 6:			
6. Made and recorded observations to detail points.			
• <i>Correctly identified and distinguished between point, linear and polygon features;</i> • <i>Made observations correctly to 14 points within the site form in ,linear and polygon features;</i> • <i>Recorded the observations corr (Northings, Eastings and Elevation).</i> <i>(Award marks as indicated = 12 marks)</i>	2		
	7		
	3		
Sub-Total 6	12		
TASK 7:			
7. Entered the co-ordinates in Excel worksheet and displayed them on ArcGIS/AutoCAD.			
• <i>Correctly launched the applications (Microsoft Excel and ArcGIS/AutoCAD);</i> • <i>Correctly keyed in the coordinates into an excel workbook and saved them in a .csv extension;</i> • <i>Correctly imported the coordinates into ArcGIS/AutoCAD and displayed them.</i>	2		
	4		
	4		

(Award marks as indicated = 10 marks)			
Sub-Total 7	10		
TASK 8:			
8. Digitized and joined the points to form point, linear and polygon features.			
• <i>Correctly created different feature classes (point, polyline and polygon).</i>	3		
• <i>Accurately digitized the features as per the ground appearance</i>	6		
(Award marks as indicated = 8 marks)			
Sub-Total 8	9		
TASK 9:			
9. Prepared and printed out a topographical map of the site in an A4 size paper.			
• <i>Correctly identified a map layout</i>	1		
• <i>Map elements correctly identified and added;</i> ▪ <i>legend</i> ▪ <i>title</i> ▪ <i>scale</i> ▪ <i>neat line</i>	1		
	1		
	1		
	1		
• <i>Correctly exported the map layout and printed out in A4 size paper.</i>	3		
(Award marks as indicated = 8 marks)			
Sub-Total 9	8		
GRAND TOTAL	60		
ASSESSMENT OUTCOME			

The candidate was found to be:	
Competent ☐	Not yet Competent ☐
<i>(Please tick as appropriate)</i>	
<i>(The candidate is competent if the candidate obtains at least 50%)</i>	
Feedback from the Candidate:	
Feedback to the Candidate:	
Candidate Signature	Date:
Assessor's Signature	Date