

061306T4CSC

COMPUTER SCIENCE LEVEL 6

ICT/OS/CS/CR/05/6/A

ICT/OS/CS/CR/05/6/B

Demonstrate Database Management Skills

July/August 2025



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

OBSERVATION CHECKLIST

INSTRUCTIONS TO ASSESSOR

1. Assess the candidate as the practical progresses observing the critical areas
2. You are required to mark the practical as the candidate perform the tasks
3. You are required to take video clips at critical points
4. Ensure the candidate has a name tag and registration code at the back and front

OBSERVATION CHECKLIST

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
Task1: Installation of MS SQL server/ Management Studio (SSMS)			
i. Downloaded Ms SQL server	5		
ii. Installed Ms SQL server	5		
Created database	2		
Sub-Total	12		
Task 2: Design the database using Entity modelling			
i. Explained entity relationship components	5		
ii. Designed entity relationship	5		
iii. Implemented relationship in tables	5		
Sub-Total	15		
Task 2: Design the database using Entity modelling			
i. Provided normalization rules	5		
ii. Created normalizations in tables	5		
Sub-Total	10		
Task 4: Create SQL DMLqueries (select, insert, delete, update)			
i. Created a database	3		
ii. Inserted records to a table	3		
iii. Extracted records from a table using select command	3		
iv. Deleted records form a table	3		
v. Updated tables in a database	3		
Sub-Total	12		

Task 5: Create SQL DDL queries (alter, drop, truncate)			
i. Applied alter command to change the table	3		
ii. Applied drop command to tables	3		
iii. Applied truncate command to tables	3		
Sub-Total	9		
Task 6: Apply Right Join and Left join to database tables			
i. Created two related tables	3		
ii. Join related tables using the right join command	3		
iii. Joined related tables using the left join command	3		
iv. Joined related tables using the outer join command	3		
Sub-Total	12		
Task 8: Apply OOP to databases			
i. Created object-oriented databases (OODB)	5		
ii. Manipulated databases using objects and attributes	5		
Sub-Total	10		
Task 9: Apply inheritance in databases			
i. Created inheritance in Object oriented databases	5		
ii. Extracted records from tables under inheritance	5		
Sub-Total	10		

Task 10: Create and manipulate views tables (Create view, rename view, drop view)			
i. Created views in a table	5		
ii. Renamed the view in a table	3		
iii. Dropped the view in a table	3		
Sub-Total	11		
TASK 11: Create a database called patient, two table pDetails and pAilments, insert records, extract records.			
1. a. Created a database	3		
b. Created stDetails and StMarks tables	6		
2.			
a. Inserted records to stDetails	4		
b. Inserted records to stMarks	4		
3. a) added total field to the table	2		
b) added Avg field to the table	2		
c) calculated sum and store in total field			
d) calculated Average and stored in Avg field.			
Sub-Total	25		
TASK 12: Create a database called patient, two table pDetails and pAilments, insert records, extract records.			
1. a. Created a database	3		
b. created tables(pDetails,pAilment)	6		
2.			
a. Inserted records to pDetails	3		
b. Inserted records to Ailment	3		
3,			

a) Extracted list of male patients from Umoja who are suffering from Malaria	2		
b) Extracted a list of female patients who are suffering from typhoid	2		
c) Extracted a list of patients suffering from Malaria or Typhoid	2		
d) Extracted a list of patients suffering from severe TB	2		
e) Created an index on patNo field in pDetails	2		
Sub-Total	80		
GRAND TOTAL	130		
ASSESSMENT OUTCOME			
<p>The candidate was found to be:</p> <p style="text-align: center;">Competent <input type="checkbox"/> Not yet Competent <input type="checkbox"/></p> <p><i>(Please tick as appropriate)</i></p> <p><i>(The candidate is competent if the candidate obtains at least 50%)</i></p>			
Feedback from the Candidate:			
Feedback to the Candidate:			

Candidate Signature	Date:
<hr/>	<hr/>
Assessor's Signature	Date
<hr/>	<hr/>