061206T4CYB
A CYBER SECURITY TECHNICIAN LEVEL 6
SEC/OS/CS/CR/07/6/A

SECURE DATABASE

Nov. / Dec. 2023



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

PRACTICAL ASSESSMENT

Time: 3 Hours

INSTRUCTIONS TO CANDIDATE

- 1. This assessment requires the candidate to demonstrate competence against unit of competency: **Secure Database.**
- 2. Time allocated: 3 Hours.
- 3. In this assessment, you will be required to perform three (3) practical tasks.
- 4. Write your name, registration code, date and sign in the practical assessment attendance register.
- 5. You have **10 minutes** to carefully read through the instructions and to collect the tools/resources required for the tasks.
- 6. The assessor will record your performance at critical points using audio-visual means.

This paper consists of 3 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing

The following resources will be provided to the candidate:

- A Computer with an operating system installed.
- ♦ SQL server Management studio
- ♦ Reliable internet connection
- Exam booklet

Instructions:

In this assessment, you are required to complete the following tasks:

Task 1: Database vulnerability assessment - 25 marks

- 1. Open SQL Server Management Studio.
- 2. Connect to an instance of the SQL Server Database Engine or localhost.
- **3.** Using the vulnerability assessment feature scan the master database (one of the system databases) vulnerabilities
- **4.** Save the scans.
- 5. Analyze the report by identifying the following;
 - a) The number of security checks.
 - **b)** The number of security checks that passed.
 - c) The number of failed security checks, their respective severities and a justification of failure.
- **6.** Use the actionable remediation information provided by the report to resolve the issues failed.

Tasks 2: Deploying patches for SQL Server Management Studio - 15marks

- 7. Check and document SQL server version
- 8. Create a backup for the following system databases; master, model, msdb, and tempdb
- 9. Using the SQL server management studio's check update feature install the latest updates or download them from the official Microsoft website.
- 10. Using the SQL server profiler tool indicate the health status of SQL server instance.
- 11. Save the trace file on the desktop.

Task 3: Configure windows firewall for SQL Server - 10 marks

12. You are required to configure the windows firewall to allow the SQL Server applications in the firewall.