

061005T4ICT

ICT TECHNICIAN LEVEL 5

IT/OS/ICT/CR/4/5

Manage Database Systems (Ms. Access)

March/April 2025



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

WRITTEN ASSESSMENT

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATE

1. This paper consists of **TWO** sections: **A** and **B**.
2. Answer **ALL** questions in section **A** and **ANY THREE** (3) questions in section **B**.
3. Marks for each question are indicated in the brackets.
4. Candidates are provided with a separate answer booklet
5. Do not write on the question paper.

This paper consists of THREE (3) printed pages
Candidates should check the question paper to ascertain that all
pages are printed as indicated and that no questions are missing.

SECTION A (40 MARKS)***Answer all question in this section***

1. Define the following terms as used in database management.
 - a) Database Model
 - b) Field
 - c) Record (3 marks)
2. Outline FOUR advantages of using a relational database model over a flat file system. (4 marks)
3. Majirani College is exploring the use of an electronic database system to replace their current manual student record system. State FOUR challenges the college might face when transitioning to an electronic database system. (4 marks)
4. State FOUR tools used in Ms Access to aid Normalization. (4 marks)
5. A database administrator is designing a library database to track information about books, authors, and borrowers. Highlight TWO purposes of establishing each of the following keys within this database design.
 - a) Primary Key (2 marks)
 - b) Foreign Key (2marks)
6. Differentiate between CREATE TABLE and ALTER TABLE commands in Ms Access. (2 marks)
7. State FOUR types of database views. (4 marks)
8. List FOUR primary types of relationships applied on tables in database management. (4 marks)
9. State FOUR key types of data integrity that is applied on data stored in databases. (4 marks)
10. Outline FOUR items that should be included in a report on database testing findings. (4 marks)
11. List THREE common methods used to print or export database tables and queries. (3 marks)

SECTION B: (60 MARKS)***(Answer any three questions)***

12.

- a) Discuss FIVE advantages of using a database system over manual filing system (10 marks)
- b) Describe FIVE key differences between a database and a manual filing system. (10 marks)

13.

- a) Discuss the main steps involved in database testing (10 marks)
- b) In the context of databases, attributes are the properties or characteristics used to define or describe an entity. Describe FIVE distinct types of attributes. (10 marks)

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- a) Discuss FIVE key types of database components. (10 marks)
- b) Describe FIVE types of database models (10 marks)

15.

Describe the FIVE essential database objects
in a database system (10 marks)

- a) Describe the following FIVE database operations as used in MS access (10 marks)
 - i. DROP
 - ii. INSERT
 - iii. UPDATE
 - iv. DELETE
 - v. SELECT