

031306T4PSY

Manage Health Records Database Level 6

PSY/OS/CO/CR/10/6

July/August 2025



AMREF INTERNATIONAL TRAINING CENTER

CANDIDATE WRITTEN ASSESSMENT

Time: 3 HOURS

INSTRUCTIONS TO CANDIDATE

1. Marks for each question are indicated in the brackets.
2. The paper consists of **TWO** sections: **A** and **B**.
3. Candidates are provided with a separate answer booklet
4. **DO NOT** write on this question paper.

**This paper consists of TWO (2) 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 the questions in this section.

1. Hospital X has hired a new database administrator for their MS Access patient system. Mention ANY FOUR (4) functions this database administrator will perform. (4 Marks)
2. A student is learning MS Access for the first time in class. Identify FOUR (4) database objects in MS Access that the student might use. (4 Marks)
3. A medical center is moving from paper records to a digital database system. Mention FOUR (4) advantages they will gain from using a database to store patient data. (4 Marks)
4. An IT consultant needs to recommend database software options to a client. List FOUR (4) examples of database software the consultant can recommend. (4 Marks)
5. Hospital Y needs to generate monthly reports from their MS Access patient database. Mention FOUR (4) types of reports that Hospital Y can create using MS Access reporting features. (4 Marks)
6. A student is creating a management system using MS Access for a school project. State FOUR (4) types of queries in MS Access that the student can create. (4 Marks)
7. Hospital X is choosing between different database technologies for their application. Identify FOUR (4) differences between a relational database and a NoSQL database to help the hospital decide. (4 Marks)
8. A nutrition clinic is considering implementing a DBMS to replace manual records. List ANY FOUR (4) advantages of a database management system (DBMS) that will benefit the clinic. (4 Marks)
9. database designer is establishing relationships between tables in a clinic software system. Using an example, differentiate between primary and foreign keys that the designer will use. (4 Marks)
10. Hospital A is using MS Access to manage their book collection and wants to ensure data accuracy. State FOUR (4) data validation techniques that the hospital can implement in MS Access. (4 Marks)

SECTION B:(60 MARKS)

Answer Any Three Questions

11. Y Medical Clinic currently schedules patient appointments using a paper-based system. They need to track the following information: patient details (ID, name, phone, email),

doctor information (doctor ID, name, specialization), appointment details (appointment ID, date, time).

- a. Design a comprehensive appointment database system for Y Medical Clinic by creating the THREE appropriate tables showing table names, column names with suitable data types. (15 Marks)
 - b. Establish relationships between the tables by illustration based on the given requirements using primary and foreign keys. (5 Marks)
12. Healthy Life Clinic is a new medical facility that currently keeps all patient records on paper. The clinic director has decided to implement a computerized health records database using MS Access to improve efficiency and patient care.
- a. Examine FIVE key components that should be included when designing a health records database for Healthy Life Clinic. (10 Marks)
 - b. Describe the process of pre-testing the health records database before full implementation at the clinic. (10 Marks)
13. Medical Center X has successfully implemented an MS Access health records database system. However, staff members are struggling to use the system effectively, leading to data entry errors and incomplete patient records.
- a. Analyze FIVE strategies that Medical Center X can implement to ensure proper use of their health records database by staff. (10 Marks)
 - b. Explain FIVE ways the center can establish a regular review process to evaluate the effectiveness of their health records database. (10 Marks)
14. Rural Hospital Y has been using an MS Access health records database for two years. Recently, they have noticed the system is running slowly, some patient records are corrupted, and staff complain about frequent crashes.
- a. Discuss FIVE maintenance activities that Rural Hospital Y should perform to keep their health records database running optimally. (10 Marks)
 - b. Evaluate FIVE importance of regular data backup and recovery procedures in maintaining the hospital's health records database. (10 Marks)