

FINAL EXAM DATABASE PLANNING DESIGN AND MANAGEMENT II

Diploma Computer Science and IT

Date: Monday 18<sup>th</sup> July 2022.

Duration: 3hrs Section A: Circle the correct option for each of the multi choice questions. 2 marks

1. Which of the following is not a database management system?  
a) Oracle b) SQL server c) Java script d) Mysql
2. Which of the following is NOT associated with the file based approach?  
a) Fixed queries b) Sharing of data d) Isolation of data
3. Which statement displays all the tables in a given database?  
a) Show database tables b) show tables c) show databases
4. Which SQL Statement removes only rows of data from a given table?  
a) Drop table b) update table c) delete
5. Which of the following is not an advantage of database systems?  
a) Improved data integrity b) Economies of scale  
c) Improved backup and recovery services d) Data dependence

**Section B Practical Answer all Questions from this section 2 marks each**

The Management Centenary Bank has released funds to develop a database application to store and manage all the bank Records. As a database designer you are requested to use MySQL to assist in the development of the database application by carefully coming up, executing and recording only the SQL statements to accomplish the following tasks.

1. Create a database with a suitable name.
2. Create the following tables within the database with appropriate column names and data types.
  - a. Bankcustomers { customerId, Accountno, customername, age, city }
  - b. Accounts {Accountno, bal}
  - c. Loans { customerId, Amount}
3. Change the name of the table Bank customers to customers.
4. Remove the column city from the customers table.
5. Add a new column date to the loans table.
6. Change the name of the column bal to balance in the accounts table.
7. Add a primary key to the accounts table.

8. Insert into the above tables the following data.

**Customers**

CustomerId	Accountno	Customername	Age
C01	211	Joan	30
C02	212	Moses	40
C03	213	Jordan	55
C04	214	Roman	27

**Accounts**

Accountno	Balance
211	40000
212	50000
213	60000

**Loans**

CustomerId	Amount	Date
C01	2000	2022-07-05
C02	3000	2022-05-25
C03	7000	2022-05-23

- Display names of all the customers in the bank.
- Display the names of customers and their account numbers.
- Display Names of all customers who are 40 and above in terms of age.
- Change the age of Jordan to 60.
- Remove the details of Roman from the customers table.
- Display names of all customers having an **a** in their names.
- Display the total amount of money in the bank.
- Display the total amount of money lent out by the bank.
- Display the number of customers who borrowed money in the month of May 2022.
- Display names of customers and their account balances.
- Display Names of customers together with the amount of money they borrowed from bank
- Display names of all customers together with the money they borrowed from the bank and their account balances.