061005T4ICT

ICT TECHNICIAN LEVEL 5

IT/OS/ICT/CR/4/5

Manage Database Systems

Nov/Dec 2024

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

PRACTICAL ASSESSMENT

Time: 3 HOURS

INSTRUCTIONS TO CANDIDATE:

1. You are required to perform the following tasks

    i.   *Task 1:   Creating a Database*

    ii.   *Task 2:   Entering Data*

    iii. *Task 3:   Creating relationships between the tables*

    iv.   *Task 4:   Creating forms, queries and reports*

2. You have been provided with the following resources for the practical tasks:

    - A working Computer installed with Microsoft Access

    - Printer

    - Printing papers

Task 1: Creating a Database

Create a new database in Microsoft Access named "Employees" in the CDACC EXAM folder.

Create the following tables in design view using the fields and data types given:

- **Employees**
  - EmpID (Number, Primary Key)
  - FirstName (Short Text)
  - LastName (Short Text)
  - DateOfEmp(Date/Time)
  - Gender (Short Text)
  - DeptID (Short Text)

- **Department**
  - DeptID (Short Text)
  - DepartmentName (Short Text)
  - EmpID (Number, Primary Key)
  - Title(Short Text)

- **Payroll**
  - EmployeeID (Number, Primary Key)
  - DeptID (Number, Foreign Key from Students table)
  - Salary(Currency)
  - Allowance(Currency)

Task 2: Entering Data

Populate the Employee table with the following data:

EmpID	FirstName	LastName	DateOfEmp	Gender	DeptID
100	John	Daniel	09/09/1999	M	PR1
101	Mary	James	31/11/2001	F	FN1
102	Jane	Steve	15/6/2003	M	FN1
103	Harry	Kane	17/01/2001	M	RE1
104	Hellen	Samuel	19/8/2000	F	PR1
105	Josh	Antony	13/2/2001	M	ST1

Populate the department table with the following data:

DeptID	DepartmentName	EmpID	Title
PR1	Procurement	100	Manager
FN1	Finance	101	Finance officer
FN1	Finance	102	Clerk
RE1	Reception	103	Receptionist
PR1	Procurement	104	Stores officer
ST1	Stores	105	Stores officer

Populate the payroll table with the following data:

EmployeeID	DeptID	Salary	Allowance
100	PR1	150,000	20,000
101	FN1	120,000	20,000
102	FN1	70,000	20,000
103	RE1	50,000	20,000
104	PR1	70,000	20,000
105	ST1	50,000	20,000

Task 3: Create relationships between the tables:

Task 4:

- **Create forms** for each table. Save it as employeefrm, departmentfrm and payrollfrm respectively.
- **Create a query** named "employeeQry" that shows EmpID, FirstName, LastName and DateOfEmp of all employees employed in year 2021.
- **Create a query** named "DeptQry" that shows DeptID, FirstName and DepartmentName of all employees in the finance department.
- **Generate a report** named "EmployeeReport" from the Employee query.
- **Generate a report** named "PayrollReport" from the Payroll table group by EmployeeID.
- **Print the Employee report** generated in (iv) above.