

**061006T4ICT**

**ICT TECHNICIAN LEVEL 6**

**IT/OS/ICT/CR/08/6**

**Manage Information System**

**Nov/Dec 2024**



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

**PRACTICAL ASSESSMENT**

**Time: 2 HOURS**

**INSTRUCTIONS TO CANDIDATE:**

1. You are required to perform the following tasks:-

- i. Task 1: Create a Spreadsheet Management Information System (30 marks)**
- ii. Task 2: Create a Database Management Information System (21marks)**
- iii. Task 3: Compare spreadsheet MIS an and Access MIS (4marks)**

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

- i. Computer installed with Microsoft office suite

**TASK 1: Create a Spreadsheet Management Information System**

a) Open Ms Excel and enter the data in the table below and name it Students Report

|   | A     | B         | C       | D      | E          | F       | G   | H        | I            | J     | K | L |
|---|-------|-----------|---------|--------|------------|---------|-----|----------|--------------|-------|---|---|
|   | AdmNo | SName     | FName   | Gender | Assignment | Project | CAT | End_Term | Averagescore | Grade |   |   |
| 1 |       |           |         |        |            |         |     |          |              |       |   |   |
| 2 | 1030  | Mariam    | Jane    | F      | 80         | 55      | 78  | 69       |              |       |   |   |
| 3 | 1438  | Milosovic | Kennedy | M      | 65         | 45      | 45  | 52       |              |       |   |   |
| 4 | 1123  | Bookie    | Lynda   | F      | 45         | 69      | 47  | 48       |              |       |   |   |
| 5 | 7841  | Kukoch    | Brian   | M      | 78         | 89      | 51  | 63       |              |       |   |   |
| 6 | 1500  | Loruci    | Mary    | F      | 42         | 25      | 56  | 44       |              |       |   |   |
| 7 | 1534  | Lubo      | Pius    | M      | 56         | 36      | 28  | 32       |              |       |   |   |
| 8 |       |           |         |        |            |         |     |          |              |       |   |   |

b) Manipulating data

- (i) Set the Averagescore column to present number to **zero** decimal place
- (ii) Using a function, determine the average score per student
- (iii) Using the admission number, sort the data in descending order
- (iv) Using the criteria below, apply a logical expression to determine the student grade using average score

| Marks        | Grade |
|--------------|-------|
| 0-39         | E     |
| 40-59        | D     |
| 60-69        | C     |
| 70-79        | B     |
| 80 And above | A     |

- (v) Using an expression to determine average scores per unit
- (vi) Create a pie chart representing average score per unit and the respective unit
- (vii) Apply a function to determine the highest and lowest Average score

c) Manipulating worksheet

- i. Rename the active worksheet to Score
- ii. Freeze AdmNo column for ease of scrolling through the information.
- iii. Printing you work

**TASK 2: Create a Database Management Information System**

## a) Create a database

- i. Open Ms. Access and create a database named STUDENTS-REPORT
- ii. Create the Performance table and Students table.
- iii. Create a form for each of the tables and use it to enter the data into the tables.

Performance Table

| Adm No | Assign-ment | Project | CAT | End Term | Average score |
|--------|-------------|---------|-----|----------|---------------|
| 1030   | 80          | 55      | 78  | 69       |               |
| 1438   | 65          | 45      | 45  | 52       |               |
| 1123   | 45          | 69      | 47  | 48       |               |
| 7841   | 78          | 89      | 51  | 63       |               |
| 1500   | 42          | 25      | 56  | 44       |               |
| 1534   | 56          | 36      | 28  | 32       |               |

Students Table

| SName     | FName   | Adm No | Gender |
|-----------|---------|--------|--------|
| Mariam    | Jane    | 1030   | F      |
| Milosovic | Kennedy | 1438   | M      |
| Bookie    | Lynda   | 1123   | F      |
| Kukoch    | Brian   | 7841   | M      |
| Loruci    | Mary    | 1500   | F      |
| Lubo      | Pius    | 1534   | M      |

- iv. Create an appropriate relationship between the tables

## b) Manipulate data

- i. Develop an expression that tabulates student average score.
- ii. Create a query command named PERFORMANCE to retrieve students by gender in ascending order of average score.
- iii. Create a query named PASS to display students who have scored at least 45 marks in each subject by gender.
- iv. Generate a report for the queries in task b(ii) and task b(iii) and save appropriately.

**TASK 3: Compare spreadsheet MIS and Access MIS**

Jacma Training Centre has contracted you to manage examination records for 1000 students.

- a) With respect to Information management systems give two advantages of using: -
  - i. Spreadsheet application
  - ii. Database application