THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATIONS COUNCIL OF TANZANIA

CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

036/2   **INFORMATION AND COMPUTER STUDIES 2**

(For Both School and Private Candidates)

Time: 3 Hours   **ANSWERS**   **Year: 2019**

Instructions

1. This paper consists of three questions

2. Answer two questions.

1. The following worksheet shows at the end of the year 2019 promotional results or form two students from modern secondary school read the information given state table then answer the questions that follow

Solution: Create the given worksheet and save it as "Modern SS."

  - Use Microsoft Excel or any spreadsheet application.
  - Copy the data table into the worksheet.
  - Save the file with the name "Modern SS."

2. Solution: Use the function to calculate the total marks and the average marks for each student (round off the average marks to one decimal place).

  - Total Marks: Use the formula =SUM(C3:F3) in column G for each student.
  - Average Marks: Use the formula =ROUND(G3/4, 1) in column H for each student.

3. Solution: Use an appropriate function to generate the position for each student.

  - Position: Use the =RANK(G3, G$3:G$13, 0) function in column I to rank students based on their total marks.

4. Solution: Assign comments based on the average marks.

  - Use the IF function in column J:
    =IF(H3>=65, "Promoted to F3", IF(H3>=50, "Reseat the examination", "Repeat F2"))

5. Solution: Insert a row in cell A15 and merge cells (A to J). Type "The total number of students required to repeat F2."

  - Insert a new row after row 13.
  - Merge cells A15:J15.
  - Type "The total number of students required to repeat F2."

6. Solution: Generate a function in K15 that will return the number of students who scored an average of below 50.

  - Use the formula =COUNTIF(H3:H13, "<50") in cell K15.

7. Solution: Validate the student marks to ensure only whole numbers from 0 to 100 are entered.

  - Highlight the range C3:F13.
  - Go to "Data" > "Data Validation."
  - Set the criteria as "Whole Number" between 0 and 100.
  - Add a warning message like "Marks should be between 0 and 100."

8. Solution: Create a three-dimensional pie chart with labeled data of total marks for each subject against student names.

  - Calculate the total marks for each subject in row 14 using =SUM(column_range) for Mathematics, English, Computer, and Physics.
  - Highlight the row with student names and the total marks row.
  - Insert a 3D Pie Chart and label the data.

9. Solution: Print the document.

  - Ensure the worksheet is formatted properly.
  - Go to "File" > "Print" to print the document.

2. The meaning of the corrosion circles KS decided to shift the members details from Roku database manual files to the electronic database due to its efficiency data manipulation is an it it's not your required to a created database for keeping members details two tables named the employee and the loan in the database created in part a the fields for each table are given in the following table

Solution: Create a database called "Mkulima" for keeping members' details.

  - Use a database management system like Microsoft Access or MySQL.
  - Create a new database and name it "Mkulima."

2. Solution: Design two tables named "Employee" and "Loan" in the database.

  - Employee Table:
    - Fields: PNo (Primary Key), NationalID, FirstName, LastName, Sex, Age, Date_Employed, Salary
    - Data Types: Use appropriate types like Number, Text, Date, and Currency.

  - Loan Table:
    - Fields: LoanNo (Primary Key), LoanDate, Monthly_Instalments, Loan_Amount, PNo (Foreign Key)
    - Data Types: Use Number, Date, and Currency as appropriate.

3. Solution: Validate the fields.

  - Age Field: Set a validation rule in the Age field to only allow values >= 20. Add an error message like "Age must be 20 or above."
  - Sex Field: Restrict input to "F" or "M" using validation rules. Add an error message like "No such gender" for invalid entries.

4. Solution: Create a form using Form Wizard to enter records in the Employee table.

- Use the Form Wizard tool in your database system.
- Include all Employee table fields in the form.
- Save the form as Employeeform.
- Enter the provided data for employees into the form.

5. Solution: Create a form using Form Wizard to enter records in the Loan table.

- Use the Form Wizard tool in your database system.
- Include all Loan table fields in the form.
- Save the form as Loanform.
- Enter the provided data for loans into the form.

6. Solution: Create a query to display required fields with a calculated total.

- Create a query that includes the fields PNo, NationalID, FirstName, LastName, LoanNo, LoanDate, Monthly_Instalments, and Loan_Amount.
- Add a calculated field called "Total" to show annual instalments using the formula: Total: [Monthly_Instalments] * 12.
- Save the query as Loanquery.

7. Solution: Generate a report based on the Loanquery.

- Use the Report Wizard in your database system.
- Base the report on Loanquery.
- Format the report and save it as Loanreport.

8. Solution: Print the document.

- Ensure the forms, query, and report are correctly formatted.
- Use the print option to print the required documents.

3. (a) Use a Microsoft supervisor to design the following student identical

 Solution: Use Microsoft Office Publisher to design the Student Identity Card.

  - Open Microsoft Publisher and create a new document.
  - Set the page background color to pink for the contact and heading.
  - Insert the required details:
   - Examination Number: Replace S106/0056 with your Examination Number.
   - Admission Number: Include the given format.
   - Date: Use the current date.
  - Add a border and picture from the picture library available on your computer.
  - Group all elements to form the Identity Card.

2. Solution: Prepare a presentation using the following guidelines.

  - Use a uniform design view for all slides.
  - Include your Examination Number on each slide.
  - Set slides to run automatically after 5 seconds.
  - Add the fixed date and slide number as the footer or header of each slide.
  - Insert a clip art picture of a laptop computer in the first slide.
  - Use the symbol to link each slide to the first slide.

  Slide Details:
  - Slide I: Title "Information and Communication Technology" and three active links: Application, Opportunities, and Advantages.
  - Slide II: Two areas where ICT has been applied.
  - Slide III: Two career opportunities in ICT.
  - Slide IV: Two self-employment opportunities achieved using a computer or ICT devices.
  - Slide V: Conclusion of your presentation.

3. Solution: Save and print your document.

  - Save the Identity Card and the presentation with appropriate names.
  - Use the print option to print both documents.