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: 2013**

Instructions

1. This paper consists of three questions

2. Answer two questions.

Solution:

Part (a): Create the spreadsheet as shown above.
1. Open Microsoft Excel and create a spreadsheet.
2. Input the data as shown in the table. Ensure the headings "SN," "Student's Name," "Physics," "Chemistry," "Mathematics," "Computer," "Biology," "Total," "Average," and "Remark" are entered correctly.
3. Enter the student names and their respective scores for each subject.

Part (b): Adjust the column width for all columns.
1. Select all columns in the spreadsheet.
2. Adjust the column width to fit the data. For the "Name" and "Remarks" columns, set the width to 12.

Part (c): Enter the formulae required and calculate the following:

(i) Average for each subject (round off the average to one decimal place):
1. Below the Physics column, enter the formula `=AVERAGE(C5:C10)` to calculate the average score for Physics.
2. Repeat the same formula for Chemistry, Mathematics, Computer, and Biology by changing the column range.
3. Round off the averages to one decimal place by formatting the cells (use "Number" format with one decimal).

(ii) Average for each student (round off the average to one decimal place):
1. In the Average column, enter the formula `=AVERAGE(C5:G5)` for each student to calculate their average score across all subjects.
2. Copy the formula down the column for all students.
3. Format the results to one decimal place.

Part (d):

(i) Using the grading system given, assign grades to all students for all subjects. The grading system is:
- Between 75 and 100: A
- Between 65 and 74: B
- Between 55 and 64: C
- Between 45 and 54: D
- Between 35 and 44: E
- Below 35: F

To assign grades:
1.Use the formula `=IF(C5>=75,"A",IF(C5>=65,"B",IF(C5>=55,"C",IF(C5>=45,"D",IF(C5>=35,"E","F")))))` for each subject.
2. Copy the formula across all subject columns and for all students.

(ii) Create a worksheet with the heading "SN, First name, Last name, Grades, and Remarks" for all form four students:
1. Insert a new worksheet in the same Excel file.
2. Create the headings "SN," "First Name," "Last Name," "Grades," and "Remarks."
3. Split the full names into first and last names by using the "Text to Columns" tool in Excel.
4. Transfer the grades and remarks from the first worksheet.

Part (e): Assign Remarks:
1. Use a formula to assign remarks based on the average score:
   - If the average is greater than or equal to 50, assign "Good."
   - If the average is less than 50, assign "Poor."
   Formula: `=IF(H5>=50,"Good","Poor")`
2. Copy the formula down the Remarks column for all students.

Part (f): Save and Print:
1. Save the spreadsheet as "Kandawe Secondary School."
2. Print the spreadsheet and the additional worksheet for submission.

2. Solution:

Part (a): Create a database named "Nkamba Store" with two tables named "Supplier" and "Goods."
1. Open Microsoft Access and create a new database named "Nkamba Store."
2. Create the first table and name it "Supplier." Add the following fields with appropriate data types:
   - Supplier ID (Number, Primary Key).
   - Company Name (Text).
   - Contact Address (Text).
   - Town (Text).
3. Enter the data for the Supplier table as shown in the image.
4. Create the second table and name it "Goods." Add the following fields with appropriate data types:
   - Good's ID (Number, Primary Key).
   - Good's Name (Text).
   - Units in Stock (Number).
   - Supplier's ID (Number).
5. Enter the data for the Goods table as shown in the image.

Part (b): Create a relationship between the two tables.
1. Go to the "Database Tools" tab and click "Relationships."

2. Add both tables to the relationship window.
3. Link "Supplier ID" from the Supplier table to "Supplier's ID" in the Goods table.
4. Enforce referential integrity to ensure valid relationships.

Part (c): Prepare a form for each table.
1. Go to the "Create" tab and click "Form Wizard."
2. Select all fields from the Supplier table and follow the wizard steps.
3. Save the form as "Supplier Form."
4. Repeat the process for the Goods table and save the form as "Goods Form."

Part (d): Create a query to display Supplier's ID, Contact Address, and Town for suppliers from Mwanza.
1. Go to the "Create" tab and click "Query Design."
2. Add the Supplier table to the query.
3. Select the fields "Supplier ID," "Contact Address," and "Town."
4. In the "Town" field criteria, enter `"Mwanza"`.
5. Save the query as "First Query."

3. (a) Create a HTML document giving details of three favorable fruits in a list of letters is showing in the snapshot below:
To create an HTML document displaying a list of three favorable fruits as shown in the image:

```
<!DOCTYPE html>
<html>
<head>
   <title>My Favorite Fruits</title>
</head>
<body>
   <h3>My three favorable fruits are:</h3>
   <ol type="A">
      <li>Orange</li>
      <li>Apple</li>
      <li>Banana</li>
   </ol>
</body>
</html>
```

Explanation:
1. `<!DOCTYPE html>`: Declares the document as an HTML5 file.
2. `<html>`: Defines the root element of the HTML document.
3. `<head>`: Contains metadata and the title of the page.
4. `<title>`: Sets the title of the webpage as "My Favorite Fruits."

5. `<body>`: Contains the content of the webpage.
6. `<h3>`: Displays a heading "My three favorable fruits are:" in a smaller size.
7. `<ol type="A">`: Creates an ordered list where the items are labeled with uppercase letters (A, B, C).
8. `<li>`: Adds list items for "Orange," "Apple," and "Banana."

- Steps to Save and Run:
1. Copy the code into a text editor such as Notepad or any HTML editor.
2. Save the file with a `.html` extension, e.g., `fruits.html`.
3. Open the file in a web browser to view the output.

(b).
To create the webpage shown in the image using HTML:

```
<!DOCTYPE html>
<html>
<head>
   <title>Registration form</title>
   <style>
      body {
         background-color: #c0c0c0; /* Set background color as "cocoa" */
         font-family: Arial, sans-serif;
      }
      form {
         width: 50%;
         margin: auto;
         padding: 20px;
         background-color: #ffffff;
         border: 1px solid #000;
         border-radius: 5px;
      }
      input[type="text"], input[type="email"], input[type="password"] {
         width: 100%;
         padding: 10px;
         margin: 10px 0;
         border: 1px solid #ccc;
         border-radius: 4px;
         font-size: 14px;
         max-length: 80; /* Set maximum length of the input field */
      }
      input[type="submit"], input[type="reset"] {
         padding: 10px 20px;
         background-color: #4CAF50;
         color: white;
```

```
            border: none;
            border-radius: 4px;
            cursor: pointer;
        }
        input[type="submit"]:hover, input[type="reset"]:hover {
            background-color: #45a049;
        }
        label {
            font-weight: bold;
        }
    </style>
</head>
<body>
    <h2 style="text-align: center;">Registration form</h2>
    <form>
        <label for="fullname">Full Name:</label>
        <input type="text" id="fullname" name="fullname" maxlength="80">

        <label for="email">Email address:</label>
        <input type="email" id="email" name="email" maxlength="80">

        <label for="password">Password:</label>
        <input type="password" id="password" name="password" maxlength="80">

        <p><strong>Are you a Tanzanian citizen?</strong></p>
        <label><input type="radio" name="citizen" value="Yes"> Yes</label>
        <label><input type="radio" name="citizen" value="No"> No</label>

        <p><strong>Your age:</strong></p>
        <label><input type="radio" name="age" value="<20"> &lt;20</label><br>
        <label><input type="radio" name="age" value="21-30"> 21-30</label><br>
        <label><input type="radio" name="age" value="31-40"> 31-40</label><br>
        <label><input type="radio" name="age" value=">40"> &gt;40</label>

        <br><br>
        <input type="submit" value="Submit">
        <input type="reset" value="Reset">
    </form>
</body>
</html>
```

Guidelines:

1. Set Heading:
   - The heading of your page is "Registration form" and is center-aligned.

2. Background Color:
   - The background color is set to "cocoa" using the `background-color` property in CSS.

3. Input Field Size and Length:
   - The `width` of text boxes (Full Name, Email, and Password) is set to 100%, and the `maxlength` attribute limits the maximum input to 80 characters.

4. Save and Test:
   - Save the file with the name `registration_form.html`.
   - Open the file in a web browser to verify the layout and functionality.

5. Copy to PowerPoint:
   - Take a screenshot of the webpage and paste it into a PowerPoint presentation. Save the presentation with the name "Webpage Presentation."

6. Print:
   - Print the document directly from the browser or PowerPoint, depending on the required format.