# 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 Year: 2014

# **Instructions**

- 1. This paper consists of three questions
- 2. Answer two questions.



- 1. (a) Using the basic HTML code, design a four pages website which consists of Home page, Contact page, Qualification page, and Hobbies page. The description of each page is given.
- The home page has to be as the page shown below:

### Description of the home page

- Table width and height are 1400 and 600 respectively with column span of two.
- The size of the heading "Welcome to my page" is level one.
- Set #808080 as the background color of the word welcome to my page.
- The background of the menu and links is #808080 with 100px width.
- Set #808080 as the background color of the word "do not hesitate to visit our web page", with height and width 200px and 40px, respectively.
- The background color of the word copyright "computer schools.com" should be #999966.

## Description of the contact page

- The heading should be "contact me" with level one.
- Set the background color as "wheat".
- Add your exam number, year, and nation in a list form of your choice.

## Description of the qualification page

- The heading should be "my qualification" with level one.
- Set the background color as "silver".
- Write a "Website designer" as your qualification.
- Create a link to the homepage and name it back home.

#### Description of the hobbies page

- The heading with level one should be "my hobbies".
- Set the background color as "silver".
- Add your best three hobbies in a list form of your choice.
- (b) Create links of all other pages in the home page; name each link according to the page name.
- (c) Design links in such a way that when the customers open a contact or hobbies page on the website, they can go back to the home page and also can view your qualifications. Name the links as "click here to go back" and "view my qualifications" respectively.

#### Solution:

To design the requested website with four pages (Home, Contact, Qualification, and Hobbies), I will provide the HTML code for each page. Each page adheres to the specified requirements.

(a). Home Page:

```
<!DOCTYPE html>
<html>
<head>
  <title>Home Page</title>
  <style>
    body {
      background-color: #FFFFFF;
    table {
      width: 1400px;
      height: 600px;
    }
   h1 {
      background-color: #808080;
      text-align: center;
    }
    .menu {
      background-color: #808080;
      width: 100px;
    }
    .link {
      background-color: #808080;
      text-align: center;
      height: 40px;
      width: 200px;
    }
    .copyright {
      background-color: #999966;
      text-align: center;
 </style>
</head>
<body>
 <111>
          <a href="contact.html">Contact</a>
          <a href="qualification.html">Qualifications</a>
          <a href="hobbies.html">Hobbies</a>
        >
```

```
<h1>Welcome to my page</h1>
        Do not hesitate to visit our website
      <div class="copyright">
    Copyright © 2012 computer schools.com
  </div>
</body>
</html>
(b). Contact Page:
<!DOCTYPE html>
<html>
<head>
  <title>Contact Page</title>
  <style>
    body {
      background-color: wheat;
    }
    h1 {
      text-align: center;
  </style>
</head>
<body>
  <h1>Contact Me</h1>
  Exam Number: [Your Number]
  Year: [Your Year]
  Nation: [Your Nation]
  <a href="index.html">Back to Home</a>
</body>
</html>
(c). Qualification Page:
<!DOCTYPE html>
<html>
<head>
  <title>Qualification Page</title>
  <style>
```

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```
body {
      background-color: silver;
    }
    h1 {
      text-align: center;
    }
  </style>
</head>
<body>
  <h1>My Qualifications</h1>
  Website Designer
  <a href="index.html">Back to Home</a>
</body>
</html>
4. Hobbies Page:
<!DOCTYPE html>
<html>
<head>
  <title>Hobbies Page</title>
  <style>
    body {
      background-color: silver;
    }
    h1 {
      text-align: center;
    }
  </style>
</head>
<body>
  <h1>My Hobbies</h1>
  <ul>
    |Hobby 1|
    |Hobby 2|
    |Hobby 3|
  <a href="index.html">Back to Home</a>
</body>
</html>
```

- 2. In the year 2011, Tanzania exported the following goods with their respective amounts in tones: Cocoa-1040, Cotton-5000, Pineapple-2000, Flowers-325, Golds-10000, Silver-1580, Fish-9000, Beans-200, Sunflower-1860, Wheat-1200.
- (a) Using a spreadsheet program, tabulate the above information in a suitable form. Serial number should be in column A.
- (b) Put "THE UNITED REPUBLIC OF TANZANIA, TANZANIA EXPORTED GOODS IN 2011" as a header of your document (Bold and align heading at center in merged cells).
- (c) Insert Row/Column (depending on the format of your table) and name it %EXP.
- (d) Calculate by using a formula and show in your table, the Total Export figure for Tanzania in tones.
- (e) Obtain the percentage contribution of each export to the Total Export of Tanzania in 2011, round off to two decimal places.
- (f) Insert a column and name it REMARKS, use a function formula to indicate low/high percentages. If the percentage is less than five, the remark is "Low" otherwise the remark is "High".
- (g) Create a two-dimensional pie chart with labeled data, using the data you have just obtained in the worksheet. Save it as "Goods 2011".
- (h) Using the data you have just obtained in the worksheet, create a bar chart called "%EXP" with goods names in the horizontal axis and Percentages in the vertical axis.
- (i) Copy and paste in Microsoft Office PowerPoint, the bar chart created in part (h) above. Save as Bar chart presentation.
- (j) Save your work as Exports.
- (k) Add your Examination number if it is not part of the file name.

#### Solution:

To solve this task step by step using a spreadsheet program, we follow the instructions outlined in the question.

Step (a): Tabulate the data

Open a spreadsheet program (e.g., Microsoft Excel) and create the following table:

Serial No   Goods		Export Amount (Tones)		
1	Cocoa	1040		
2	Cotton	5000		
3	Pineapple	2000		
4	Flowers	325		
5	Golds	10000		
6	Silver	1580		
7	Fish	9000		
8	Beans	200		
9	Sunflower	1860		

| 10 | Wheat | 1200

Step (b): Add a header

- 1. Merge cells in Row 1 across all columns (e.g., A1 to C1).
- 2. Enter the header: "THE UNITED REPUBLIC OF TANZANIA, TANZANIA EXPORTED GOODS IN 2011".
- 3. Format the text in bold and align it to the center.

Step (c): Insert a column for `%EXP`

1. Add a new column named `%EXP` next to "Export Amount (Tones)".

Step (d): Calculate the total export

1. In a new cell (e.g., C12), write the formula to calculate the total export:

```
=SUM(C2:C11)
```

2. The result will be `32105` tones.

Step (e): Calculate the percentage contribution

1. In the `%EXP` column (e.g., D2), calculate the percentage contribution of each good:

```
=(C2/\$C\$12)*100
```

Replace `C2` with the cell containing the export amount and `\$C\$12` with the cell containing the total export.

- 2. Drag the formula down to fill all rows in the `%EXP` column.
- 3. Format the values to two decimal places.

Step (f): Add remarks for low/high percentages

- 1. Insert a new column named "REMARKS".
- 2. Use the following formula to categorize percentages:

Replace `D2` with the cell containing the percentage value.

3. Drag the formula down to fill all rows in the "REMARKS" column.

Step (g): Create a two-dimensional pie chart

- 1. Select the goods names and their respective percentage contributions.
- 2. Go to the "Insert" tab and select "Pie Chart".
- 3. Label the chart with the title "Goods 2011".
- 4. Save the chart as "Goods 2011" in the worksheet.

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Step (h): Create a bar chart

- 1. Select the goods names and their respective percentage contributions.
- 2. Go to the "Insert" tab and select "Bar Chart".
- 3. Label the horizontal axis as "Goods" and the vertical axis as "Percentages".
- 4. Save the chart as "%EXP" in the worksheet.

Step (i): Copy and paste the bar chart into PowerPoint

- 1. Open Microsoft PowerPoint.
- 2. Copy the bar chart from the spreadsheet and paste it into a slide.
- 3. Save the PowerPoint presentation as "Bar chart presentation".

## Step (j): Save your work

1. Save the spreadsheet file with the name "Exports".

## Step (k): Add your Examination number

1. Append your examination number to the file name (e.g., `Exports\_12345.xlsx`).

The detailed spreadsheet will look like this:

Serial No   Goods	Export A	mount (Tones)   %E	XP   REMARKS
1   Cocoa	1040	3.24   Low	
2   Cotton	5000	15.57   High	
3   Pineapple	2000	6.23   High	
4   Flowers	325	1.01   Low	
5   Golds	10000	31.15   High	
6   Silver	1580	4.92   Low	
7   Fish	9000	28.03   High	
8   Beans	200	0.62   Low	
9   Sunflower	1860	5.79   High	
10   Wheat	1200	3.74   Low	

- 3. The table below shows records of a Region Health Center in terms of Registration Number of the Patients, name of the patient, sex, Date Admitted, Ward allocated, and Diagnosis results of the Patient.
- (a) Using Microsoft Access database management system (Microsoft Office Access), create a database called "PATIENT DATABASE". Within a database create a table called "Patients Record" with the same fields as the table above, use the appropriate data type for each field.
- (b) Create a query for M (Male) patients who were allocated WARD 4C. Save it as "Male 4C".
- (c) Create a report showing F (Female) patients who were diagnosed with HIV and allocated WARD 2A. Save it as "Female HIV".

- (d) Create a form which shows Male patients who were allocated WARD 5B. Save it as "Males".
- (e) Copy and paste in Microsoft Office Word, the form created in part (d) above. Save as Males Word.
- (f) Save your work as "Patients" and print.

Solution:

To perform the required tasks, follow these steps:

## Step (a): Create the database and table

- 1. Open Microsoft Access and create a new database named "PATIENT DATABASE".
- 2. Create a new table named "Patients Record" with the following fields and their respective data types:
  - ID: AutoNumber (Primary Key)
  - Registration Number: Short Text
  - Patient Name: Short Text
  - Sex: Short Text
  - Date In: Date/Time
  - Diagnosis: Short Text
  - Ward: Short Text
- 3. Enter the data into the table as per the question.

## Step (b): Create a query for Male patients in WARD 4C

- 1. Go to the "Create" tab and select "Query Design".
- 2. Add the "Patients Record" table to the query.
- 3. Select the fields "Registration Number", "Patient Name", "Sex", "Date In", "Diagnosis", and "Ward".
- 4. Under the "Sex" column, set the criteria to "M".
- 5. Under the "Ward" column, set the criteria to "4C".
- 6. Save the query as "Male 4C".

#### Step (c): Create a report for Female patients diagnosed with HIV in WARD 2A

- 1. Create a query first by following the steps below:
  - Go to the "Create" tab and select "Query Design".
  - Add the "Patients Record" table to the query.
  - Select the fields "Registration Number", "Patient Name", "Sex", "Date In", "Diagnosis", and "Ward".
  - Under the "Sex" column, set the criteria to "F".
  - Under the "Diagnosis" column, set the criteria to "HIV".
  - Under the "Ward" column, set the criteria to "2A".
  - Save the query as "Female HIV Query".
- 2. Create a report:
  - Go to the "Create" tab and select "Report Wizard".
  - Select the "Female HIV Query" as the data source.

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- Follow the wizard steps to customize the report.
- Save the report as "Female HIV".

# Step (d): Create a form for Male patients in WARD 5B

- 1. Create a query first by following the steps below:
  - Go to the "Create" tab and select "Query Design".
  - Add the "Patients Record" table to the query.
  - Select the fields "Registration Number", "Patient Name", "Sex", "Date In", "Diagnosis", and "Ward".
  - Under the "Sex" column, set the criteria to "M".
  - Under the "Ward" column, set the criteria to "5B".
  - Save the query as "Males Query".
- 2. Create a form:
  - Go to the "Create" tab and select "Form Wizard".
  - Select the "Males Query" as the data source.
  - Follow the wizard steps to customize the form.
  - Save the form as "Males".

# Step (e): Copy and paste the form into Microsoft Word

- 1. Open the "Males" form in Microsoft Access.
- 2. Copy the form by selecting it and pressing Ctrl + C.
- 3. Open Microsoft Word and paste the form using Ctrl + V.
- 4. Save the Word document as "Males Word".

## Step (f): Save your work

- 1. Save the database as "Patients".
- 2. Print the required documents as instructed.