



EXAMINATIONS COUNCIL OF ESWATINI
Eswatini Prevocational Certificate of Secondary Education

INFORMATION AND COMMUNICATION TECHNOLOGY

5924/2B

Paper 2 Part B (Practical)

October/November 2022

2 hours

Additional Material

Candidates Source files

Total: 60 marks

READ THESE INSTRUCTIONS FIRST

Carry out all instructions in each step.

Enter your name, Centre number and candidate number on **EVERY** printout before it is sent to the printer.

Printouts with hand written candidate details will not be marked.

The number of marks is given in brackets [] at the end of each question or part question.

This document consists of **6** printed pages and **2** blank pages.

TASK 1

- 1 Create an evidence document using word processing software.
 - Place your name, candidate number and centre number in the header of this document.
 - Save this Evidence document in your work area with the filename: **20222A_** followed by your candidate number, *for example: 20222A_6850*.

You will need your Evidence Document during examination to place screenshots when required.

TASK 2 – DATABASE

You are going to create a database called **2022ArtWorld**, which contains details of artists and paintings.

- 2 Using appropriate content of file tblPaintings and tblArtists do the following;
 - Import to create tables and name them **tblPaintings** and **tblArtist**.
 - Set primary key for both tables to ID (system default ID).
 - Set the following data types for each table in Design View.

Table 1: **tblArtist**

Field Name	Data Type
ID	AutoNumber
ArtistName	Short Text
ArtistSurname	Short Text
Gender	Short Text
Born	Date/Time
Died	Date/Time
BirthCountry	Short Text
Nationality	Short Text
ArtForm	Short Text
ArtFormCode	Short Text
NumberOfPaintings	Number
For	Number
Against	Number

Table 2: **tblPaintings**

Field Name	Data Type
Painting	Short Text
Artist	Short Text
YearPainted	Number
Age	Number
ID	Short Text
Height	Number
Width	Number
Rating	Short Text
Place	Short Text
InsuranceValue	Number

- Change the field properties of the **YearPainted** in **tblPaintings** so that:
 - The field accepts a year from 1494 to 1970 inclusive.
 - Appropriate validation text is inserted.
 - An appropriate error message is displayed if an incorrect year is entered.
 - Place in your Evidence Document a screenshot of the **YearPainted** field properties to show the data restriction applied and error message. [6]

3 In the **tblpaintings** table insert a new field named **Area** as the last field in the table.

- Apply a data type that will store the calculation of the area of each painting.
- Insert a calculation for the **Area** field which will multiply the **Height** field by the **Width** field.
- Place in your Evidence Document a screenshot to show the field properties for the **Area** field. Make sure there is evidence of the data type and the calculation used. [4]

4 Create a column data entry form called **frm_one**, using selected fields from the **tblPaintings** table that includes only the fields **Painting**, **YearPainted**, **Rating** and **InsuranceValue** to display one record at a time.

- Apply 4 features to this form to make the design user friendly.
- Insert the image named **2022Girl** into the form header area. Align this image to the image to the right in the header area.
- Fill the background of the Detail section of the form with a light green colour.
- Add the option "Poor" to the list of items in the **Rating** field.
- Place in your Evidence Document a screenshot to show:
 - "Poor": Has been added on the Rating list.
 - Place in your evidence document a screenshot of **frm_one** in form view. [7]

5 Create a query using contents of table **tblArtists**.

- Create a query called **qry_one**.
- Show only the following field name in this order; **BirthCountry**, **Gender** and **NumberOfPaintings**.
- Modify the query so that it displays the total number of paintings created by only male artists, per birth country [**BirthCountry** field], as shown below.

BirthCountry	Gender	SumOfNumberOfPai
France	Male	7230
Germany	Male	476
Great Britain	Male	407
Italy	Male	235
Lithuania	Male	474
Netherlands	Male	2100
Puerto Rico	Male	356
Romania	Male	843
Russia	Male	1166
Spain	Male	243
United States	Male	4989

- Save and Place in your Evidence Document a screenshot to show the design view showing the structure and formula **qry_one**. [4]

6 Create a query using selected fields from the table **tblPaintings**.

- Name the query **qry_two**.
- Show only the following field names in this order; **Painting, Artist, ID and Place**.
- Display the records of paintings where the **ID** field is five or six characters long and the **Place** field has no data.
- Save and place in your Evidence Document a screenshot of a design view to show the criteria set for the query **qry_two**. [5]

7 Create a query using selected fields from the table **tblArtists**.

- Name the query **qry_three**.
- Make sure only the following fields are fully visible; **ArtistName, ArtistSurname, Nationality, For, and Against**.
- Add a new field called **Diff** which will calculate the difference between the **For** field values and the **Against** field values.
- Display only artists whose **Nationality** is **not** French.
- Save the query.
- Place in your Evidence Document a screenshot of design view to show the criteria set for the query **qry_three**. [7]

TASK 3 – SPREADSHEET

The spreadsheet contains a list of famous Impressionist artists.

NOTE:

- Use formulae and/or functions for ALL calculations in the spreadsheet.
- All formulae and/or functions should be inserted in such a manner that the correct results will still be obtained, even if the existing data changes.
- Should you need to use building blocks, use the allocated space in the spreadsheet.

Open the file **2022_Famous.xlsx** and work in the **2022_Art** worksheet.

8 Centre the row headings in **row 7** vertically. [1]

9 The number of artworks created by each artist is stored in **column K**.

Insert a function in cell **H3** to calculate the total number of artworks created. [2]

10 The nationality of an artist is stored in **column H**.

Insert a formula in **cell H4** to determine what percentage of artists is **NOT** of French nationality [**column H**]. Refer to the formula below.

$$\text{Number of non-French artists} / \text{Total number of artists} \times 100$$

[6]

11 The art forms practised by each artist are stored as a code in **column I**. The first letter of this code refers to the preferred art form of the artist.

In cell **J8** use a function to look up the preferred art form of the first artist. Use the first letter of the art form code in **column I** as the lookup value and worksheet **2022Code** for the array. This function must include both absolute and relative referencing. [5]

12 **Column L** shows the number of 'for' votes an artist receives for his/her artwork.

- Insert a function in **cell N8** to determine whether the artist has one of the three highest Votes "For" counts [**column L**].
- Display the message "Top3" if the artist is in the top three, or otherwise leave the cell empty.
- Ensure that the function is replicated to the other cells in the range.
- Save the **2022Famous** spreadsheet. [8]

13 Print your spreadsheet showing the values. Make sure:

- Column A,C,D,E and I is hidden.
- It is in portrait orientation.
- your name, centre number and candidate number appear in the header.
- Row and column headings are displayed.
- The content of all cells are fully visible. [3]

14 Print your spreadsheet showing the formulae. Make sure:

- Column A,C,D,E and I remain hidden.
- It is in landscape orientation.
- your name, centre number and candidate number appear in the header.
- Row and column headings are displayed.
- The content of all cells are fully visible.

[2]

15 Print your evidence document.

Total: [60 marks]

