

PUSASQF406
Application of IT – Basic of Excel

Time: 2 hour

Total Marks: 60 marks

Note:

1. The candidate has option to either attempt question 3A or question 3B. Rest all questions are mandatory.
2. Numbers to the right indicate full marks.
3. The candidates will be provided with the formula sheet and graph papers [if required] for the examination.
4. Use of approved scientific calculator is allowed.

Q1 Answer the following

15 marks

A

5 Marks

Write a macro named "delete_column" that deletes column B in the active worksheet.

B

5 Marks

Write a macro named "calculate_average" that computes the average of values in column A and displays the result in cell B1. You have to copy the data from Data sheet1 and calculate further.

C

5 Marks

Write a macro that will color the cells in column A green, if the value is lower than 500, and red if it is more than or equal to 500.

Q2 Answer the following

15 Marks

A

5

Marks

You are given two columns FirstName and Surname in the Sheet2 of the data. Write a macro that will join the name and surname in a single cell in the your answer worksheet with a space in between the name and surname.

B

5

Marks

Create a macro to calculate the number of characters in each of the names in above question.

(Hint – you may use the "LEN" function in excel)

C

5

Marks

Write a macro that utilizes a Do Until Loop to continuously prompt the user for input until they enter a number greater than 50.

Q3 Attend Q3A or Q3B**30 Marks****A.**

Question: Develop an Excel VBA UserForm for a simple inventory management system. The UserForm should include the following functionalities:

1. Input Fields:
 - Item Name (Text Box)
 - Quantity (Text Box)
 - Price per Unit (Text Box)
 - Category (Combo Box: Choose from "Electronics", "Clothing", "Books", etc.)
2. Buttons:
 - "Add Item": Clicking this button should add the entered item details to a list displayed on the UserForm. Each item should be added as a new row in the list, displaying all the entered information.
 - "Calculate Total Value": Clicking this button should calculate and display the total value of the inventory based on the quantity and price per unit of each item added to the list.
 - "Clear": Clicking this button should clear all input fields and reset the list of items.
 - "Close": Clicking this button should close the UserForm.
3. Additional Requirements:
 - Provide appropriate labels for all input fields and buttons on the UserForm.
 - Format the UserForm to make it user-friendly.
 - Include appropriate title and headings to guide the user through the inventory management process.
 - Ensure that quantity and price per unit fields accept only numeric input.
4. Scoring Criteria:
 - Correct functionality of all input fields, buttons, and error handling: 20 marks
 - Accurate calculation of total inventory value: 5 marks
 - User-friendly design and layout of the UserForm: 5 marks

OR**B****30 Marks**

Question: Develop an Excel VBA macro to automatically generate a pie chart based on the data in a specified range. The macro should include the following functionalities:

1. Data Input:
 - Define a named range "PieChartData" that includes the data to be plotted on the pie chart. You have to use the data from Chart data sheet in the Data file.
2. Chart Creation:
 - Create a new worksheet named "PieChart" to display the pie chart.
 - Develop a macro to generate a pie chart based on the data in the "PieChartData" range.

The chart should have appropriate titles, data labels, and legend.

- Ensure that the chart is easy to understand.

3. Chart Customization:

- Customize the appearance of the pie chart by applying a suitable chart style.
- Add data labels to each slice of the pie chart to display the corresponding values.

4. Additional Requirements:

- Ensure that the macro is well-documented with clear comments to explain the purpose of each section of code.
- Optimize the code for efficiency and readability.

5. Scoring Criteria:

- Correct functionality of chart creation, customization, and error handling: 20 marks
- Visual appeal and clarity of the generated chart: 5 marks
- Quality of code documentation, efficiency, and readability: 5 marks