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KIRIRI WOMEN'S UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2023/2024 ACADEMIC YEAR
FIRST YEAR, SECOND SEMESTER EXAMINATION
FOR THE DIPLOMA IN INFORMATION COMMUNICATION
TECHNOLOGY
DIT 1009 – VISUAL PROGRAMMING

Date: 18TH APRIL 2022
Time: 2:30PM – 4:30PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

- a) Define Visual programming. (2 Marks)
- b) State three main differences between traditional programming and the visual programming practices (6 Marks)
- c) Explain the following terms as used in visual programming. (6 Marks)
 - i) Properties
 - ii) Methods
 - iii) Events
- d) When you create a new project in visual studio environment (IDE). The first form into your environment is created by default.
 - i) State four properties you can change or give in that form (4 Marks)
 - ii) Describe the process of adding a new form to an existing project. (4 Marks)
- e) Define the following controls available in visual studio toolbox.
 - i) Textbox
 - ii) Label
 - iii) Picture Box
- f) Differentiate between form design window and code editor window (4 Marks)
- g) There are two types of dialog boxes which are input box and message box. Describe any two available icons for a message box (4 Marks)

QUESTION TWO (20 MARKS)

- a) Briefly explain the following as used in visual programming.
 - i) Design time
 - ii) Runtime (4 Marks)
- b) Using a simple program code, explain the following types of iterative constructs
 - i) While loop (5 Marks)
 - ii) For loop (5 Marks)
- c) Form design window and Code Editor window are key to understand as a visual programming student. Explain the difference between the two. (6 Marks)

QUESTION THREE (20 MARKS)

- a) Explain the different between the following properties applied to most of the objects you can drag and drop into the design window.
- i) Backcolor property and the Forecolor property
 - ii) Name property and Text property
 - iii) Font size property and Size property (6 Marks)
- b) Write a program code to add and subtract two integer numbers after putting a suitable design. The code should be put in the button click event. (6 Marks)
- c) Briefly describe the use of the following controls as used in visual studio environment toolbox.
- 1. ListBox
 - 2. ComboBox
 - 3. Button
 - 4. RadioButton (8 Marks)

QUESTION FOUR (20 MARKS)

- a) Outline the function of each of the following properties of a textbox. (4 Marks)
- i) BorderStyle
 - ii) Forecolor
 - iii) Password
 - iv) Multiline
- b) Write the Visual C# code used in the button click event to compute the average of the student's Marks stored in an array variable called studentMarks. (6 Marks)
- c) You are required to design an appealing interface for patient's registration form for a hospital system being developed. Indicate and explain at least five controls in visual studio toolbox you will use to come up with such interface . (10 Marks)

QUESTION FIVE (20 MARKS)

- a) Explain the function of each of the following in visual studio integrated environment (IDE) . (10 Marks)
- i) Menu bar
 - ii) Tool bar
 - iii) Solution Explorer
 - iv) Properties Window
 - v) Toolbox
- b) Write a program for a form containing two textboxes so that when click on command button "copy" the text copied from first textbox to the second textbox. (6 Marks)
- c) Explain the function of radio button controls and give an example of two area or situations where it can be used to capture data. (4 Marks)