



University of Kelaniya – Sri Lanka
Centre for Distance & Continuing Education
Bachelor of Science (General) External
Third year first semester examination – 2019
2024 September
Faculty of Science
Computer Studies
COST 36593 - Event Driven Programming

No. of Questions: Four(04)

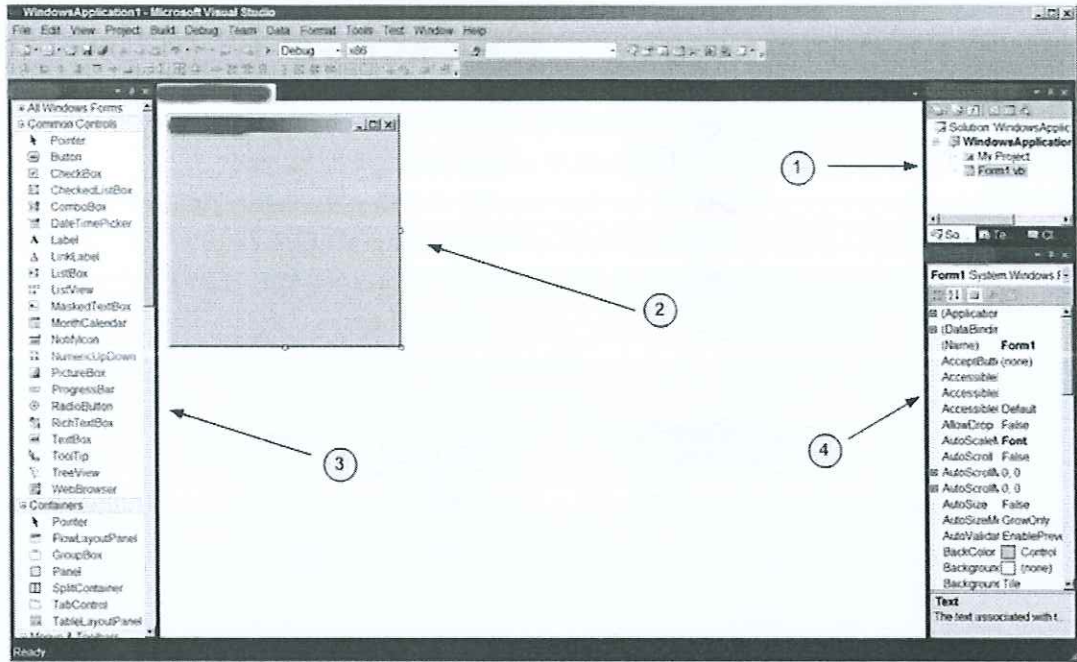
No. of Pages: Four(04)

Time: 2.5 Hours

Answer ALL questions.

- 1)
- a) What is Event-Driven Programming?
(10 Marks)
 - b) Briefly explain the following terms.
i) Events
ii) Event Handlers
iii) Event Loop
iv) Asynchronous Programming
(20 Marks)
 - c) What is meant by an event trigger.
(10 Marks)
 - d) What is visual programming ?
(10 Marks)
 - e) What is an Integrated Development Environment (IDE), and why is it significant in the field of computer programming?
(10 Marks)
 - f) What is .Net Framework?
(10 Marks)

g) Name the following four parts of visual studio IDE.



(15 Marks)

h) What are the benefits of using C# within the Visual Studio development environment?

(15 Marks)

2)

a) What is a data type in programming?

(10 Marks)

b) Briefly explain Enumerations in C# using a suitable example.

(15 Marks)

c) List five data types in C# and provide examples.

(10 Marks)

d) List five C# operators.

(10 Marks)

e) Write the syntax of a switch statement in C#.

(10 Marks)

f) Briefly explain the result of the code below.

```
private void button1_Click(object sender, EventArgs e)
{
    float a = 16.4f;
    int b = 12;
    float c;
    c = a * (b + a) / (a - b);
    MessageBox.Show("result is :" + c);
}
```

(20 Marks)

g) What is the difference between break and continue in loop?

(10 Marks)

h) What are the five toolbox controls in Visual Studio that can be used to trigger events?

(15 Marks)

3)

a) As shown below write a C# program that takes two integer inputs from two text boxes, named txtFirst and txtSecond. Then, display the sum of these two numbers using a label named lblSum.

The screenshot shows a window titled "Sum" with a standard Windows title bar. Inside the window, there are two text boxes. The first is labeled "First Number" and contains the text "15". The second is labeled "Second Number" and contains the text "45". Below these two text boxes is a label that reads "Sum of Two Number = 60". At the bottom center of the window is a button labeled "Run".

(20 Marks)

b) Briefly explain the terms given below related to exception handling.

- i) try block
- ii) catch block
- iii) finally block

(15 Marks)

c) List three types of exception handling methods that can be used in event-driven programming.

(10 Marks)

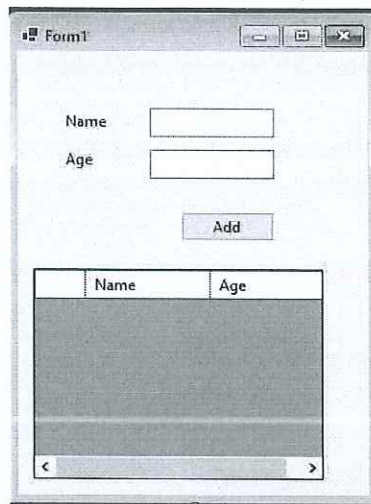
d) What are the advantages of using Methods in programming?

(15 Marks)

e) What is the difference between a parameter and an argument in a method?

(10 Marks)

f) Provide a C# code snippet that inserts the values from text boxes into a DataGridView when the user clicks the Add button. Use suitable naming for items.



(20 Marks)

- g) Write the C# code to load the following details into the above DataGridView when the form is initialized.

Name	Age
Nimal	25
Sunil	75
Kamal	45

(10 Marks)

4)

- a) What is the usage of a Database Management System?

(10 Marks)

- b) What are the advantages of a DBMS over a File System?

(10 Marks)

- c) Outline the fundamental steps for establishing a connection to a SQL Server database.

(15 Marks)

- d) List the four components of the .NET framework.

(20 Marks)

- e) Briefly explain the following components.

- i) Connection
- ii) Command
- iii) DataReader
- iv) DataAdapter

(20 Marks)

- f) Discuss why event-driven programming is widely used in modern software development.

(25 Marks)