16/17MICA52

Fifth Semester MCA Degree Examination, Dec.2319/Jan.2020 Programming Using C# and .Net

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- a. Explain the architecture of .NET framework 4.0 and describe its component. (08 Marks)
 - b. What is namespace? Explain the steps involved in creating a namespace and illustrate few common namespaces. (08 Marks)

OF

- 2 a. What is Boxing and unboxing? Write a C# program to demonstrate boxing and unboxing.
 - b. Write short notes on:
 - i) Windows work flow foundation
 - ii) Windows Card Space.

(10 Marks)

Module-2

- a. Define the following class and explain with program
 - i) Partial class
 - ii) Sealed class.

(08 Marks)

b. Explain with example the method of implementing encapsulation using class properties and accessors and mutators. . (08 Marks)

OR

4 a. Explain the characteristics of abstract classes and abstract methods.

(05 Marks)

b. List the difference between properties and indexers with example.

(05 Marks)

c. Write a program to add two complex number using operator overloading.

(06 Marks)

Module-3

- 5 a. What are delegates? Explain the steps involved in creating and using delegate in C# program. (06 Marks)
 - b. What is connection object? Explain the procedure of getting connected to a database and running the following queries with relevant example:
 - i) Insert record to a table.
 - ii) Select records from a table and place in grid.

(10 Marks)

OR

6 a. Describe the architecture of ADO .NET.

(06 Marks)

b. Explain try-catch finally statement with example.

(04 Marks)

c. What is data adapter? Write a C# code to create a data set from a data adapter.

(06 Marks)

Module-4

- 7 a. Illustrate working with following controls with a windows form application example:
 - i) CheckBox
 - ii) RadioButton
 - iii) GroupBox. (09 Marks)
 - b. Explain different types of keyboard events. Demonstrate with coding some of the keyboard handling. (07 Marks)

OR

- 8 a. Write a program for addition of two numbers from text boxes and display the result in the form using button click event. (04 Marks)
 - b. Explain WPF architecture.

(08 Marks)

c. Write short notes on MDI windows.

(04 Marks)

Module-5

9 a. Explain session tracking in detail.

(08 Marks)

b. Explain different AJAX server controls.

(08 Marks)

OR

a. Explain web application development with ASP .NET by writing steps to explain validation controls. (08 Marks)

(06 Marks)

b. Explain in detail multitier application architecture.c. Write short note on UpdatePanel in ASP .NET AJAX

(02 Marks)

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