



# CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

16/17MCA52

**Fifth Semester MCA Degree Examination, Jan./Feb. 2021**

## **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

- 1 a. Write the architecture of .NET framework with necessary diagrams. (08 Marks)
- b. What is Common Language Runtime? Discuss the role of CLR in executing a program. (08 Marks)

**OR**

- 2 a. Define boxing and unboxing. Explain the same with an example program. (08 Marks)
- b. Define the following:
  - (i) CTS
  - (ii) Metadata and assemblies
  - (iii) Name Space
  - (iv) Scope of variables and its categories. (08 Marks)

### Module-2

- 3 a. Write a C# program to illustrate the concept of Nested Classes. (06 Marks)
- b. How properties are used to access data members in C#? Explain with an example program. (05 Marks)
- c. Define static members. How static members are used in C# program? (05 Marks)

**OR**

- 4 a. What is runtime polymorphism? Illustrate the same with a program. (08 Marks)
- b. How multiple interfaces can be implemented in C#? Explain with an example program. (08 Marks)

### Module-3

- 5 a. What is Delegate? Write a C# program to create and implement a delegate. (08 Marks)
- b. Define event. Explain the implementation of event with an example program. (08 Marks)

**OR**

- 6 a. What is exception? List any four common C# exceptions. (05 Marks)
- b. Write a C# program to implement nested try blocks. (05 Marks)
- c. How custom exceptions are handled in C#? Explain with an example program. (06 Marks)

### Module-4

- 7 a. Write a C# program to display hidden text in a password box. (08 Marks)
- b. Write a C# program to change fonts using checkboxes. (08 Marks)

**OR**

- 8 a. Write a C# program to draw on a form using the mouse. (08 Marks)
- b. Write a program to add, removes and clear ListBox items. (08 Marks)

### Module-5

- 9 a. Discuss about Multitier Application Architecture. (08 Marks)
- b. What is Session tracking? Explain the same with respect to Cookies. (08 Marks)

**OR**

- 10 a. How to create an Website using ASP.NET? (08 Marks)
- b. What is AJAX? Discuss about script manager control and update panel control in AJAX. (08 Marks)

\* \* \* \* \*

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.