USN | | | | | | | | | |

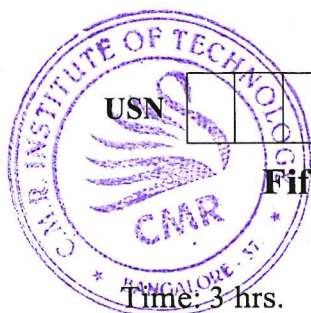**16/17MCA52**

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)

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