Seventh Semester B.E. Degree Examination, July/August 2021
C# Programming and .NET

Time: 3 hrs.

Max. Marks:100

Note: *Answer any FIVE full questions.*

1   a.   Explain features of .NET.   **(05 Marks)**
    b.   Explain CTS class types, structures, interface, enumeration and delegate with example.
                                                                                              (10 Marks)
    c.   Explain the features of C#.   **(05 Marks)**

2   a.   Explain any 5 commandline flags used in cordbg.exe.   **(05 Marks)**
    b.   Write C# program which display OS version, .NET version and logical drives present on the
         machine.   **(05 Marks)**
    c.   What are the output centric options of C# compiler and explain the role of CSC.exe.
                                                                                              (10 Marks)

3   a.   Explain C# parameter modifiers with example.   **(10 Marks)**
    b.   Explain static method and static data with examples.   **(05 Marks)**
    c.   What is Boxing operation? Explain boxing and unboxing with an example.   **(05 Marks)**

4   a.   What is method overloading? Give an example.   **(05 Marks)**
    b.   Explain the pillars of Object Oriented Programming in C#.   **(05 Marks)**
    c.   Explain abstract class and abstract method with an example.   **(05 Marks)**
    d.   Explain casting rule with an example.   **(05 Marks)**

5   a.   What is an exception? Explain any four core members of System·Exception type.   **(05 Marks)**
    b.   Write a C# program that throws a generic exception and catch an exception.   **(05 Marks)**
    c.   Explain object generations.   **(05 Marks)**
    d.   Explain any 5 members of System.GC type.   **(05 Marks)**

6   a.   Define interface. Explain explicit interface implementation.   **(05 Marks)**
    b.   Explain Enumerable types and cloneable objects with example.   **(10 Marks)**
    c.   Explain any 5 interfaces of System.Collections Namespace.   **(05 Marks)**

7   a.   What are delegates? Give an example for delegate.   **(05 Marks)**
    b.   Write C# program to overload + operator to add two complex numbers.   **(10 Marks)**
    c.   Define implicit and explicit conversion Routine with example.   **(05 Marks)**

8   a.   Explain the role and format of .NET assemblies.   **(10 Marks)**
    b.   Explain single file and multifile assembly.   **(05 Marks)**
    c.   Explain the role of delayed signing.   **(05 Marks)**

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