

USN

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

10MCA53

Fifth Semester MCA Degree Examination, Dec.2016/Jan.2017
Topics in Enterprise Architecture - II

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

- 1 a. What are .NET binaries? Briefly explain CIL, Type metadata and manifest. (08 Marks)
b. Briefly explain the core features of .NET. (06 Marks)
c. Explain the functions of .NET runtime (CLR), with a neat diagram. (06 Marks)
- 2 a. Explain the following briefly : i) # region and # endregion ii) Referencing external assembly iii) Output options of C# compiler iv) Response file. (08 Marks)
b. List and explain the members of System Environment class. (06 Marks)
c. List the command line flags used by CorDBG utility. Explain the steps involved in debugging the source code. (06 Marks)
- 3 a. Explain any two access modifiers and any two parameter modifiers with examples. (08 Marks)
b. Explain overriding of ToString() , Equals() , GetHashCode() methods of Systems.Object. (06 Marks)
c. Briefly explain .NET String formatting flags. (06 Marks)
- 4 a. Explain classical inheritance and containment / delegation model with examples. (08 Marks)
b. Explain the two techniques to preserve the integrity of state data in C# with examples. (06 Marks)
c. What are Abstract classes? Explain with an example. (06 Marks)
- 5 a. How does .NET framework manage garbage collection? Explain using I Disposable interface. (08 Marks)
b. List and explain the members of System.GC class. (06 Marks)
c. Explain Target Site, StackTrace and HelpLink properties of System.Exception class. (06 Marks)
- 6 a. List the member functions of Queue and stack classes. Write separate program to demonstrate both. (08 Marks)
b. Explain the following interfaces in detail with example :
i) ICloneable ii) IComparable. (06 Marks)
c. Briefly explain the three methods to obtain interface references. (06 Marks)
- 7 a. What do you understand by delegates and events in C#? Explain in detail with example. (08 Marks)
b. Explain the overloading of equality and comparison operators in C#. (06 Marks)
c. Briefly explain the following keywords of C#, with an example.
i) Checked ii) sizeof iii) Unsafe. (06 Marks)
- 8 a. Write the steps involved in building a shared assembly under .NET Environment. How do you install/remove shared assemblies? (10 Marks)
b. Write short notes on : i) Boxing and Unboxing ii) String Builder. (10 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.