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Fifth Semester MCA. Degree Examination, December 2011 Topics in Enterprise Architecture - II

Time: 3 hrs. Max. Marks:100

Note: Answer any FIVE full questions.

- 1 a. With a neat diagram, explain the basic building block of .NET platform. (08 Marks)
 - b. What is .NET binaries? Explain single and multiple assemblies. (06 Marks)
 - c. What are namespaces? How to access namespaces? List and explain the purpose of atleast three namespaces. (06 Marks)
- 2 a. List and explain the various output options available with C# compiler. Also illustrate with an example, how to compile multiple source file, that references some external assembly.
 - b. Explain: i) Solution Explorer ii) Properties window. (08 Marks) (06 Marks)
 - c. Give an anatomy of C# console application program and discuss the variations of the main method.

 (06 Marks)
- 3 a. Explain value type and reference types. List the differences. (06 Marks)
 - b. What are enumerations? What is the default data type of the members? How would you change the default type? Give an example. (06 Marks)
 - c. With an example, explain different method parameter modifiers. (08 Marks)
- 4 a. What is encapsulation? Explain the techniques used to manipulate private data field indirectly. (08 Marks)
 - b. With an example, explain i) public class ii) sealed class iii) abstract class. (06 Marks)
 - c. Write a program to find the sum of even elements in even rows in a given jagged array.

 (06 Marks)
- 5 a. Explain the terms Bugs, Errors and Exceptions. Write a program to handle multiple exceptions. (06 Marks)
 - b. With a suitable example, explain the different ways to create your own exception. (06 Marks)
 - c. Explain the concept of garbage collections in C#. Illustrate the usage of I Disposable interface. (08 Marks)
- 6 a. What is interface? Explain the different ways to obtain the interface references. Give examples. (08 Marks)
 - b. Explain the following interfaces in detail with example:
 - i) I convertible ii) I Cloneable iii) I Comparable. (12 Marks)
- 7 a. What is a .NET delegate type? Explain asynchronous delegates, with suitable examples.
 (10 Marks)
 - b. With a suitable example, explain the events in C#. (10 Marks)
- 8 a. Explain the use of "Checked" keyword and "unsafe" code. Give examples. (10 Marks)
 - b. Explain the two conceptual views of a .NET assembly, with neat diagrams. What are the core benefits of this format? (10 Marks)