USN ☐☐☐☐☐☐☐☐☐☐   **10CS/IS761**

Seventh Semester B.E. Degree Examination, June/July 2015

C# Programming and .NET

Time: 3 hrs.   Max. Marks:100

Note: *Answer FIVE full questions, selecting*
at least TWO questions from each part.

PART – A

1   a. Discuss the issues that lead to the genesis of .NET platform. With an example of trivial calculator, explain the role of common Intermediate language. **(10 Marks)**

   b. List and explain intrinsic CTS data types and .NET namespaces in C#. **(10 Marks)**

2   a. What is the rule of response files in C# program development using command line compiler (CSC.exe) **(05 Marks)**

   b. Give the output centric options of C# complier. **(05 Marks)**

   c. Explain the role of the following directives in C# with examples.
     i) #region and #endregion   ii) # if and #endif   iii) #line **(10 Marks)**

3   a. Explain C# member variable Initialization syntax. **(04 Marks)**

   b. Write a program to illustrate the difference between value types and value types and reference types. **(06 Marks)**

   c. Give the method parameter modifier and explain each with an example. **(10 Marks)**

4   a. What are the three pillars of object oriented programming in C#? Differentiate between "is – a and "has – a" relationships. **(10 Marks)**

   b. Illustrate with an example, polymorphic support in C#. **(10 Marks)**

PART – B

5   a. List and explain with code, the core members of system. Exception type. **(10 Marks)**

   b. Describe the role of .Net garbage collection, finalization process and AdHoc destonction method. **(10 Marks)**

6   a. What is an interface? Explain three methods of obtaining interface references with examples. **(10 Marks)**

   b. With an example, Explain any four interfaces of system. Collections. **(10 Marks)**

7   a. What asynchronous delegates. Write the source code in C# to illustrate it. **(10 Marks)**

   b. Discuss the following advanced keywords in C#.
     i) Checked   ii) Unchecked   iii) Stackalloc   iv) Fixed **(10 Marks)**

8   a. Differentiate between,
     i) Single file and Multifile Assemblies   ii) Physical and Logical view of an Assembly. **(10 Marks)**

   b. Write short notes on :
     i) Cross language inheritance.   ii) Shared Assemblies. **(10 Marks)**

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