2014

C # AND NET FRAMEWORK

Paper : IT 605

Full Marks : 100

Time : Three hours

***The figures in the margin indicate full marks
for the questions.***

*Answer **any five** questions out of seven.*

1. (a) State the scope of the following variables.
   Explain with examples   10

   (i) Local variables

   (ii) Field variables

   (iii) Method parameters.

   (b) How does the CLR implement a C#
   program ?   10

2. (a) Write a program that takes a string from the
   command line input and takes another input
   of a character from the user and searches if
   the character exists in the string. If yes, count
   the number of times the character occurred
   in the string.   10

(b) What is "fall through" in switch statement ? How it is achieved in C# ? 10

3. (a) What is a standard numeric format ? Explain with examples. 10

(b) Explain different Data Provider in ADO.NET. 10

4. (a) Explain the looping constructs in C# with syntax and examples. 10

(b) Explain in details ADO.NET connected model. 10

5. (a) What happens when an exception is caused in an inner try block of a nested try block ? 10

(b) What are design patterns ? Briefly explain the three key design patterns supported in .NET. 10

6. (a) What is synchronization ? Illustrate with an example implementation of synchronization in C#. 10

(b) Create a class called Date that includes data members day, month and year and methods that could implement the following tasks : 10

- Read a date from keyboard

- Display a date

- Increment a date by one day

- Compare two dates to see which one is greater.

7. Write short notes on : 4×5=20

(a) Boxing and Unboxing

(b) Command line arguments

(c) Assemblies

(d) Marshaling.