**Object Oriented Programming with C#**

**Model Paper**

**Section A (You will get 20 MCQs in the exam)**

**Question 01**

1. Choose the correct statement about constructors in C#.NET.
   1. Constructors can be overloaded
   2. Constructors are never called explicitly
   3. Constructors have same name as name of the class
   4. All of the mentioned
2. Choose the wrong statement about run time polymorphism.
   1. The overridden base method should be virtual, abstract or override
   2. An abstract method is implicitly a virtual method
   3. An abstract inherited property cannot be overridden in a derived class
   4. Both override method and virtual method must have same access level modifier
3. Which form of inheritance is not supported directly by C# .NET?
   1. Multiple inheritance
   2. Multilevel inheritance
   3. Single inheritance
   4. Hierarchical inheritance
4. If a class inheriting an abstract class does not define all of its functions then it is known as?

a) Abstract

b) A simple class

c) Static class

d) None of the mentioned

1. Which of the following is the wrong statement about exception handling in C#.NET?
   1. finally clause is used to perform clean-up operations of closing network and database connections
   2. a program can contain multiple finally clauses
   3. the statement in final clause will get executed no matter whether an exception occurs or not
   4. all of the mentioned
2. Which of these exceptions handles the divide by zero error?
   1. ArithmeticException
   2. MathException
   3. IllegalAccessException
   4. IllegarException
3. Which of these clauses will be executed even if no exceptions are found?
   1. throws
   2. finally
   3. throw
   4. catch
4. Which of the following statements is correct?
   1. Each derived class does not have its own version of a virtual method
   2. If a derived class does not have its own version of virtual method then one in base class is used
   3. By default methods are virtual
   4. All of the mentioned
5. Which of these can be overloaded?
   1. Constructors
   2. Methods
   3. Both Constructors & Methods
   4. None of the mentioned
6. What is the result of below code segment?

**int x = 0;**

**int y = 10;**

**do {**

**y--;**

**++x;**

**} while (x < 5);**

**System.out.print(x + "," + y);**

1. 5,6
2. 5,5
3. 6,5
4. 6,6

**Section B (Answer all questions)**

**Question 02**

1. How exception handling implemented in C#? Explain using an example.
2. Briefly explain following terms with an appropriate diagram.
   1. JIT ( Just In Time) Compiler
   2. Common Language Specifications

**Question 03**

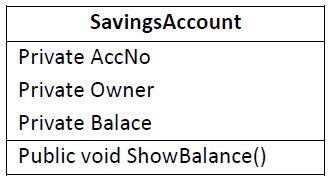
1. How is method overriding different from overloading?
2. Write a program in which accept two argument as parameter from the user and returns four output value as add, subtract, multiplication and division using class called Calculator containing Add(), Substract(), Mul(), Div() methods.

**Question 04**

1. What is the purpose of switch case statement?
2. Write a console application in C# to find the sum of the Even Numbers and Odd Numbers separately from 1 to N, where the value of N is input as a command line argument.

**Question 05**

1. Write a program in C# Sharp to find the sum of 10 numbers stored in an array.
2. Code the following class using C#.



**Section C (Answer only one question)**

**Question 06**

Explain the purpose of each of the statement in the following code.

**string sql = “SELECT \* FROM Employee” ;**

**con.Open();**

**SqlDataAdapter adapter = new SqlDataAdapter (sql,con);**

**DataSet ds = new DataSet( );**

**Adapter.Fill(ds, “Employee”);**

**DataGridView1.DataSource = ds.Tables[“Employee”];**

**Question 07**

Write C# code for the below scenario using OOP concepts.

*You are working in a library. You wish to use the computer to speed up the process of writing descriptions for books by hand. There are two types of books in the library. They are ordinary books and Golden Edition Books.*

*Ordinary book holds a title, author and price.*

*Golden Edition book represents a special book holds the same properties as any Book, but its price is always 30% higher.*

*Librarian has the ability to get the information of books at any given time.*