**.Net Framework and C# Test** Time : 40 mins.

**PLEASE NOTE** : More than 1 option may be correct. Read ALL options. Please select all appropriate options to get marks for that question. Partially correct answers will NOT get any marks.

1. Which of the following are functions of the CLR?  
   a. Memory Management  
   b. App Domain Management  
   c. Syntax error checks  
   d. Providing intellisense while coding.  
   e. Security
2. The GC runs in the following situations.  
   a. When memory is low  
   b. When the system is free  
   c. At regular intervals  
   d. When we call it explicitly in our code
3. A property that allows the object to only read data can be created in the following way.  
   a. Remove the get  
   b. Remove the set  
   c. Use a property accessor on the get  
   d. Use a property accessor on the set
4. How can you prevent an object of a class from being created from outside the class?  
   a. Create only private constructors  
   b. Use a static class  
   c. Use an abstract class  
   d. Use a sealed class
5. Which of these cannot be static?  
   a. class  
   b. enum  
   c. delegate class  
   d. interface
6. Which of the following statements are true?  
   a. Any method can be overridden in the derived class  
   b. Any method can be overloaded in the derived class  
   c. Any method can be hidden in the derived class  
   d. Any method can be sealed in the derived class.
7. In C#, Which of the following statements are true?  
   a. An abstract class must have at least one pure virtual function  
   b. An abstract class must have at least one virtual function  
   c. An abstract class must have at least one abstract function

d. An abstract method must exist in an abstract class.

1. Which of the following statements are true?  
   a. public is the default access specifier for members of a namespace  
   b. private is the default access specifier for members of a namespace  
   c. internal is the default access specifier for members of a namespace  
   d. public is the default access specifier for members of a class  
   e. private is the default access specifier for members of a class  
   f. internal is the default access specifier for members of a class
2. Give the correct syntax for an explicit implementation of an interface.  
   a. public void Delete() {…..}  
   b. public void IDb.Delete() {…..}  
   c. void Delete() {…..}  
   d. void IDb.Delete() {…..}
3. Give the syntax to create an automatic property  
   a. public int p1 {};  
   b. public int p1 { get{} set{}};  
   c. public int p1 { get; set;};  
   d. public auto int p1;
4. Which of the following statements are true?  
   a. A delegate inherits from the MulticastDelegate class  
   b. A delegate can call multiple functions with a single call  
   c. Delegates are used in event handling  
   d. Delegates allow us to write asynchronous code.
5. Which is the base class for all System (.net) generated exceptions?  
   a. Exception  
   b. ApplicationException  
   c. SystemException  
   d. System.Exception
6. Which of the following statements are true?  
   a. A variable must be initialized before passing it as a ref.  
   b. A variable must be initialized before passing it as an out.  
   c. out variables lose their initial value in a function  
   d. out variables must be assigned to before the function is over
7. Which of the following statements are true?  
   a. All collections inherit from the Collection base class  
   b. All collections have a Count property  
   c. A DictionaryEntry object is used to iterate thru a HashTable.  
   d. ArrayList<T> is the class that implements IList<T>.
8. What is the correct syntax to raise an event called MyEvent of type MyEventHandler. i.e.  
   public void MyEventHandler MyEvent();
9. RaiseEvent MyEvent;
10. MyEvent.Raise();
11. MyEventHandler();
12. MyEventHandler.Raise();
13. RaiseEvent MyHandler;
14. None of the above.
15. Give the Lambda expression for the following function.  
    int func(int a, int b){return a+b;}  
    a. a, b => a+b  
    b. (int a, int b) => a + b  
    c. (a,b) => return a +b  
    d. (a,b) => a+b
16. Syntax for creating a jagged array is :  
    a. int [,] arr = new int[3,5]  
    b. int [][] arr = new int[3,5]  
    c. int [,] arr = new int[3][5]  
    d. int [][] arr = new int[3][5]  
    e. None of the above.
17. Which statement would point to the following function?  
    void Myfunc(int a, string b, decimal c){}  
    a. Func<int , string, decimal> o = new Func<int , string, decimal>(Myfunc)  
    b. Action<int , string, decimal> o = new Action<int , string, decimal>(Myfunc)  
    c. Func<int , string, decimal> o = delegate(int a, string b, decimal c){}  
    d. Action<int , string, decimal> o = delegate(int a, string b, decimal c){}
18. What is an AppDomain?  
    a. An area within an Application where the thread runs.  
    b. An area within an Application where the program runs.  
    c. An area within an Application where the process runs.  
    d. An area within an Application where the Domain runs.  
    e. An area within a Process where the thread runs.  
    b. An area within a Process where the program runs.  
    c. An area within a Process where the application runs.  
    d. An area within a Process where the Domain runs.
19. What is the output of the following code snippet?  
    struct MyStruct{public int i;}  
    class Program{public static void Main(){MyStruct o1 = new MyStruct();  
    MyStruct o2 = new MyStruct(); o1.i =100; o2.i=200; o1=o2; o2.i=300;  
    Console.WriteLine(“{0},{1}”,o1.i,o2.i);}}  
    a. 100,200  
    b. 200,300  
    c. 300,300  
    d. 200,200  
    e. 100,300