

Midterm Examination

Short Answer Questions

20 x 2 = 40

Answer all questions. Circle the correct answer on this paper itself

1. You are designing Class B to inherit from Class A in C#. How would you declare Class B?
 - a. Class A extends B
 - b. Class B extends A
 - c. Class B: A
 - d. Class B::A

2. Does C# support multiple inheritance
 - a. Yes
 - b. No

3. How do you declare a method that could be overridden in the derived class and still have a body
 - a. Abstract
 - b. Void
 - c. Virtual
 - d. Override

4. What is the length of character
 - a. 16 bytes
 - b. 16 bits
 - c. 8 bytes
 - d. 8 bits

5. What is the top base class for every class you write in .NET
 - a. System.Object
 - b. System.Int32
 - c. System.Class
 - d. System.Intptr

6. What access modifier do you use to make your member or method accessible only to the derived classes?
 - a. internal
 - b. protected
 - c. private
 - d. public

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7. Which of the following is not a C# keyword
- a. void
 - b. checked
 - c. implicit
 - d. final
8. What is the keyword used in class definition if you don't want to other classes to derive from your class.
- a. private
 - b. sealed
 - c. final
 - d. finally
9. Which class could be used to Get directory listing
- a. Directory
 - b. DirectoryInfo
 - c. Both a and b
 - d. None of above
10. Which of the following classes could be used to read or write binary files
- a. StreamReader
 - b. StreamWriter
 - c. FileStream
 - d. None of the above
11. What is the output of this code

```
using System;
public class Test
{
    public static void Main ()
    {
        int a=10;
        Console.WriteLine(--a+a++);
        Console.WriteLine(--a+a);
        Console.WriteLine(a--);
    }
}
```

- a. 18 18 10
- b. 18 18 9
- c. 19 18 9
- d. 18 19 10

12. Which of the following is the correct way of declaring an array of strings

- a. String arr[];
- b. String arr[10];
- c. String[] arr;
- d. String[10] arr;

13. Which of the following class is used for Graphics operations

- a. System.Drawing.Graphics
- b. System.Graphics
- c. System.Drawing.Bitmap
- d. None of the above

14. What is the output of this code

```
using System;
public class Test
{
    public static void Main ()
    {
        byte a=10;
        byte b=10;
        byte c=a+b;
        Console.WriteLine(c);
    }
}
```

- a. Compiles and Generates a runtime error
- b. Generates a compile error
- c. 20
- d. 1010

15. Which of the following class is used for Regular expressions

- a. System.Regex
- b. System.Text.RegularExpressions.Regex
- c. System.Text.Regex
- d. None of the above

16. ASP.NET webservice extends which base class

- a. System.Web.Page
- b. System.Web.Service
- c. System.Web.Services.WebService
- d. None of the above

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17. Fill Methods in Graphics usually take this object as an argument
 - a. Pen
 - b. Brush
 - c. Point
 - d. None of the above

18. How do you access an element in a 2 dimensional array named arr
 - a. arr[x][y]
 - b. arr[x,y]
 - c. arr(x,y)
 - d. None of the above

19. How could you access an ASP.NET WebService
 - a. HTTP GET
 - b. Using SOAP (Simple object access protocol)
 - c. HTTP POST
 - d. All of the above

20. What is the class that needs to be extended for designing custom exceptions
 - a. System.CustomException
 - b. System.AllExceptions
 - c. System.Exception
 - d. None of the above

Programs

1. Implement a Queue with custom exception Handling
Choose you own methods and Exception Name

2. Design a Bar chart class

3. Write a web service to find an arithmetic mean of an array of numbers given as input.

4. Get all the Directories and files from your local c:\ recursively