

**Department Of Computer Science**  
**Programming with DOTNET (COMP4105)**  
**M.Sc I (Semester I )**  
**Question Bank**

### **Objective Questions**

**1. Correct way to assign values to variable 'c' when int a=12, float b=3.5, int c;**

- a) c = a + b;
- b) c = a + int(float(b));
- c) c = a + convert.ToInt32(b);
- d) c = int(a + b);

**2. Which is the String method used to compare two strings with each other ?**

- a) Compare To()
- b) Compare()
- c) Copy()
- d) ConCat()

**3. Can the method add() be overloaded in the following ways in C#?**

```
public int add() { }  
public float add(){ }
```

- A. True
- B. False
- C. None of the mentioned.
- D. None of the Above

**4. Which of the following statements is correct about constructors in C#.NET?**

- A. A constructor cannot be declared as private
- B. A constructor cannot be overloaded
- C. A constructor can be a static constructor
- D. None of the mentioned

**5. Select wrong statement about destructor in C#?**

- A. A class can have one destructor only
- B. Destructors cannot be inherited or overloaded
- C. Destructors can have modifiers or parameters
- D. All of the Above Mentioned

**6. Which of these keywords is not a part of exception handling?**

- A. try
- B. finally
- C. thrown
- D. catch

**7.What is the output for the following set of code :**

```
static void Main(string[] args)
{
    int i = 10;
    double d = 35.78;
    fun(i);
    fun(d);
    Console.ReadLine();
}
static void fun(double d)
{
    Console.WriteLine(d);
}
```

- A. 35.78 10
- B. 10 35.00
- C. 10 35.78
- D. None of the mentioned

**8.Select the wrong statement about 'ref' keyword in C#?**

- A. References can be called recursively
- B. The 'ref' keyword causes arguments to be passed by reference
- C. When 'ref' are used, any changes made to parameters in method will be reflected in variable when control is passed back to calling method
- D. All of above mentioned

**9.What will be the output of given code snippet?**

```
class program
{
    public static void Main(string[] args)
    {
        try
        {
            throw new NullReferenceException("C");
            Console.WriteLine("A");
        }
        catch (ArithmeticException e)
        {
            Console.WriteLine("B");
        }
        Console.ReadLine();
    }
}
```

- A. A
- B. B
- C. Compile time error
- D. Runtime error

**10. Which of the following statements about objects in "C#" is correct?**

- A. Everything you use in C# is an object, including Windows Forms and controls
- B. Objects have methods and events that allow them to perform actions
- C. All objects created from a class will occupy equal number of bytes in memory
- D. All of the mentioned

**11. Consider a class maths and we had a property called as sum. b is a reference to a maths object and we want the statement b.sum = 10 to fail. Which of the following is the correct solution to ensure this functionality?**

- A. Declare sum property with both get and set accessors
- B. Declare sum property with only get accessor
- C. Declare sum property with get, set and normal accessors
- D. None of the mentioned

**12. Choose the statements which makes delegate in C#.NET different from a normal class?**

- A. Delegates in C#.NET is a base class for all delegates type
- B. Delegates created in C#.NET are further not allowed to derive from the delegate types that are created
- C. Only system and compilers can derive explicitly from the Delegate or Multi caste Delegate class
- D. All of the mentioned

**13. In Inheritance concept, which of the following members of base class are accessible to derived class members?**

- A. static
- B. protected
- C. private
- D. shared

**14. Correct way to define operator method or to perform operator overloading is?**

- A. public static op(arglist) { }
- B. public static retval op(arglist) { }
- C. public static retval operator op(arglist) { }
- D. All of the mentioned

**15. Web.config file is used...**

- A. Configures the time that the server-side codebehind module is called
- B. To store the global information and variable definitions for the application
- C. To configure the web server
- D. To configure the web browser

16. **Choose the form in which Postback occur**

- A. HTMLForms
- B. Webforms
- C. Winforms

17. **The first event triggers in an aspx page is.**

- A. Page\_Init()
- B. Page\_Load()
- C. Page\_click()

18. **What class does the ASP.NET Web Form class inherit from by default?**

- A. System.Web.UI.Page
- B. System.Web.UI.Form
- C. System.Web.GUI.Page
- D. System.Web.Form

19. **We can manage states in asp.net application using**

- A. Session Objects
- B. Application Objects
- C. Viewstate
- D. All of the above

20. **Why is Global.asax is used?**

- A. Declare Global variables
- B. Implement application and session level events
- C. No use

21. **Which object can help you maintain data across users?**

- A. Application object
- B. Session object
- C. Response object
- D. Server object

22. **Which of the following control is used to validate that two fields are equal?**

- A. RegularExpressionValidator
- B. CompareValidator
- C. equals() method
- D. RequiredFieldValidator

23. **\_\_\_\_\_element in the web.config file to run code using the permissions of a specific user**

- A. < credential> element
- B. < authentication> element
- C. < authorization> element
- D. < identity> element

24. \_\_\_\_\_ is a special subfolder within the windows folder that stores the shared .NET component.

- A. /bin
- B. GAC
- C. Root

25. Which of the following is faster and consume lesser memory?

- A. SqlDataReader
- B. Data Set

26. Which of the following authentication is best suited for a corporate network?

- A. Windows
- B. Form
- C. User
- D. All

27. The .NET Framework provides a runtime environment called..... ?

- A. RMT
- B. CLR
- C. RCT
- D. RC

28. What is the base class from which all Web forms inherit?

- A. Master Page
- B. Page Class
- C. Session Class
- D. None of the Above

29. WSDL stands for \_\_\_\_\_ ?

- A. Web Server Description Language
- B. Web Server Descriptor Language
- C. Web Services Description Language
- D. Web Services Descriptor Language

30. Which of the following is used to send email message from my ASP.NET page?

- A. System.Web.Mail.MailMessage
- B. System.Web.Mail.SmtpMail
- C. Both A. and B.
- D. None of the Above

31. Which of these classes maps to the tag <input type="checkbox"/>

- A. HtmlCheckBox
- B. HtlmInputCheckBox
- C. HtmlControl
- D. None

## **Answer In One Sentence**

1. **Mention what are main components of .Net framework?**
2. **Mention what is MSIL in .NET ?**
3. **Explain what is PE (Portable Executable) File format?**
4. **Mention what is GAC in .net ?**
5. **What are the types of comment in C# with examples?**
6. **What is Jagged Arrays?**
7. **What is the difference between ref & out parameters?**
8. **What is the use of using statement in C#?**
9. **What is serialization?**
10. **What are sealed classes in C#?**
11. **How to use nullable types in .Net?**
12. **What are indexers in C# .NET?**
13. **What is ViewState?**
14. **In which event of page cycle is the ViewState available?**
15. **From which base class all Web Forms are inherited?**
16. **How long the items in ViewState exists?**
17. **What are the different types of caching?**
18. **what is boxing and unboxing?**
19. **What is the file extension of web service?**
20. **What is the difference between ExecuteScalar and ExecuteNonQuery?**
21. **What is the appSettings Section in the web.config file?**
22. **Which protocol is used to call a Web service?**
23. **What is the difference between web config and machine config?**
24. **List the events in page life cycle.**
25. **What is the difference between an HtmlInputCheckBox control and an HtmlInputRadioButton control?**

## **Short Notes Questions**

1. **What Is CLR?**
2. **What Is CLS?**
3. **What Is difference between Namespace and Assembly?**
4. **What Is Multithreading?**
5. **Difference between Overload and Override?**
6. **What Is Process, Session and cookies?**
7. **Explain Serialization?**
8. **What Is CTS?**
9. **What Is Managed and Unmanaged Code?**
10. **What Is an Assembly?**
11. **What Is Garbage Collector?**
12. **Advantages Of Crystal Reports?**
13. **Difference Between Struct and Class?**
14. **What Is an Interface?**
15. **Difference Between Virtual Method and Abstract Method?**
16. **What Is Destructor in C#?**

17. What Is Thread?
18. What Is DeadLock?
19. What are the different validators in ASP.NET?
20. What are the different Session state management options available in ASP.NET?
21. What Is Caching?Type Of Caching?
22. What Is the disadvantage of cookies?
23. What Is Advantage of Session?
24. What Is Master Page?
25. How would you enable impersonation in the web.config file?
26. Differentiate between a page theme and a global theme?
27. Explain ViewState?
28. What are the Web Form Events available in ASP.NET?
29. Explain Login Control and form authentication?
30. Explain Basic use of DataView?

### Short Answer Questions

1. Explain pen class in GDI+?
2. What Is pass by reference.Explain ref and out parameters with example?
3. Define generics and explain generic methods with suitable example.
4. Explain CLR and its Component?
5. Write a C# program to copy content of one file to another file.(use StreamReader and StreamWriter)
6. Write a C# program, create a user define exception class stack exception. Construct a class stack with members-array of integers and top of stack. The class has two methods push() and pop(). When the stack is empty or full throw the stack exception.
7. Explain disconnected architecture in ADO.NET. Write the steps to implement disconnected architecture.
8. What is webservice?What are the characteristics of webservice?
9. Explain font and color dialog box with example.
10. What are Cookies in ASP.NET?
11. What are the Advantage of ASP.NET?
12. Explain Polymorphism with Example?
13. What is an Abstract Class?
14. What is Difference between Finally and finalize block?
15. How to use Delegate with Events?
16. What are Synchronous and Asynchronous operations?
17. What is Generic class? Give an example
18. Write a C# program that accepts a distance in kilometers, converts it into meters, and then displays the result.?
19. List and explain types of dialog boxes. Also explain OpenFileDialog Dialog Box.
20. Write a program in C# which will read text files from mentioned file system location. Also list subdirectories from mentioned folder on the file system using system.IO namespace and the available classes.

21. Write a static method to accept param arrays of integers. The method should find sum of all integers passed and display the result. Write a program to call the method.
22. List any four collection classes and their usage?
23. Write a short note on SOAP?
24. What is session? Explain the purpose of a session in server side programming.
25. What are Webpages? Explain MVC model in ASP.Net?
26. Explain the phase PostBack event handling in ASP.Net?
27. List the Five type of Web Controls of ASP.Net. Explain any one in Details?
28. What is the role of webclient class? Write three properties and three method of webclient class?
29. Write a sample C# program for Inheritance? Explain the Inheritance

## Long Answer Questions

1. What is delegates? Explain multicast delegates with suitable example?
2. What is Serialization? List types of serialization and explain any one in detail?
3. Explain Asp.Net server controls?
4. Explain Data Adapter with example?
5. Write a note on Data Binding by listing ADO.Net data objects. What is the role of currency manager?
6. Explain ASP.Net architecture?
7. Write a program to draw a rectangle using Linear Gradient Brush with red and yellow colour. Also fill the rectangle with colour. Write only override OnPaint event.
8. Write a program in C# to throw and handle following exceptions in banking applications :  
 MinimumBalanceException : When balance is less than 1000  
 DailyDepositException : In a day ,only one lakh can be deposited
9. Display details of each exception. Use required members and methods.
10. Write a note on Dot Net Framework.
11. Explain the generic collection classes.
12. Explain polymorphism in C# with suitable example.
13. Write a console based program to create a linked list of employee objects using the generic class LinkedList<> . Perform following operations on the list :  
 A) Add a new employee  
 B) Display the list of employee  
 C) Total number of employee in a list.
14. Explain Generics Class, Generic Method, Generic Delegate with example?