


Question # 1

In C#, having unreachable code is always a/an _____.

 Revisit

Choose the best option

- ☐ Method
- ☒ Function
- ☐ Error
- ☐ Iterative

Question # 2

What is the output of the following code?

```
class overload
{
    public int x;
    int y;
    public int add(int a)
    {
        x = a + 1;
        return x;
    }
    public int add(int a, int b)
    {
        x = a + 2;
        return x;
    }
}
class Program
{
    static void Main()
```

Choose the best option

- ☐ 8
- ☐ 8
- ☐ 0
- ☐ 2
- ☐ 8
- ☐ 10
- ☐ 7
- ☐ 8

Question # 3

What will be the output of the following C# code?

```
static void Main(string[] args)
{
    int i, j;
    int[,] arr = new int[ 3, 3];
    for (i = 0; i < 3; ++i)
    {
        for (j = 0; j < 3; ++j)
        {
            arr[i, j] = i * 2 + j * 2;
            Console.WriteLine(arr[i, j]);
        }
    }
    Console.ReadLine();
}
```

Choose the best option

- ☒ 0, 0, 0 4, 4, 4 8, 8, 8
- ☐ 4, 4, 4 8, 8, 8 12, 12, 12
- ☐ 8, 8, 8 12, 12, 12 16, 16, 16
- ☐ 0, 0, 0 1, 1, 1 2, 2, 2

Question # 4

Consider the following code and predict the output using System:

```

class ExcDemo3
{
    public static void Main()
    {
        int[] number = { 4, 8, 16, 32, 64, 128 };
        int[] denom = { 2, 0, 4, 4, 0, 8 };
        for (int i = 0; i < number.Length; i++)
        {
            try
            {
                int[] div = new int[7];
                div[i] = number[i] / denom[i];
            }
            catch (DivideByZeroException)
            {
                Console.WriteLine("Can not Divide by zero");
            }
            catch (IndexOutOfRangeException)
            {
            }
        }
    }
}

```

Choose the best option

- ☒ DivideByZeroException
- ☐ FormatException
- ☐ IndexOutOfRangeException
- ☐ None from the options

Common Type System (CTS) describes the datatypes that can be used by managed code. CTS defines how these types are declared, used and managed in the runtime. It facilitates cross-language integration, type safety, and high-performance code execution

Common Language Specification
To enable full interoperability scenarios, all objects that are created in code must rely on some commonality in the languages that are consuming them (are their callers). Since there are numerous different languages, .NET has specified those commonalities in something called the Common Language Specification (CLS). CLS defines a set of features that are needed by many common applications. It also provides a sort of recipe for any language that is implemented on top of .NET on what it needs to support.

CLS is a subset of the CTS. This means that all of the rules in the CTS also apply to the CLS, unless the CLS rules are more strict. If a component is built using only the rules in the CLS, that is, it exposes only the CLS features in its API, it is said to be CLS-compliant. For instance, the <framework-libraries> are CLS-compliant precisely because they need to work across all of the languages that are supported on .NET.

Question # 5

_____ ensures complete interoperability among applications, regardless of the language used to create the application.

Common Language Specification (CLS)
Common Type System (CTS)
Common Language Runtime (CLR)
framework class library (FCL)
<https://www.geeksforgeeks.org/net-framework-class-library-fcl/>

Choose the best option

- ☐ CLR
- ☒ CLS
- ☐ CTS
- ☐ FCL

Question # 6

Which of the following keyword is used to overload user defined types?

Choose the best option

- ☐ Op
- ☐ Opoverload
- ☐ Operator
- ☐ Operatoroverload

Question # 7

Which of the following are valid states of Thread?

1. Unstarted
2. Runnable (Ready to run)
3. Running
4. Not Runnable
5. Dead (Terminated)

Choose the best option

- ☐ 1,2,3,4,5
- ☐ 1,2,4,5
- ☒ 1,2,3,5
- ☐ 1,2,3,4

Question # 8

C# treats the multiple catch statements like cases in a _____ statement.

Revisit

Choose the best option

- ☐ If
- ☒ Switch
- ☐ For
- ☐ While

Question # 9

Valid Code for Creating a SqlConnection Object would be:

Choose the best option

- ☒ SqlConnection conn = NEW SqlConnection("Data Source=(local);Initial Catalog=Northwind;Integrated Security=SSPI");
- ☐ SqlConnect conn = NEW SqlConnection("Data Source=(local);Initial Catalog=Northwind;Integrated Security=SSPI");
- ☐ SqlConnection conn = NEW SqlConnect("Data Source=(local);Initial Catalog=Northwind;Integrated Security=SSPI");
- ☐ All of the above

Question # 10

State whether the following statements about the managed and unmanaged code are TRUE or FALSE.

- i) Managed code is the code that is executed directly by the CLR.
- ii) Managed code directly compiles to the machine code and runs on the machine where it has to be compiled.
- iii) Unmanaged code does not have services such as security or memory management.

Revisit

Choose the best option

- ☐ i-True, ii-False, iii-False
- ☐ i-False, ii-True, iii-False
- ☒ i-True, ii-False, iii-True
- ☐ i-False, ii-False, iii-True

Question # 11

How do you manage states in asp.net mvc application

Revisit

Choose the best option

- ☐ Application
- ☐ Session
- ☐ ViewBag
- ☒ All of the above

Question # 12

What does the following C# code specify?
object Invoke(object obj, object[] parameters)

Choose the best option

- ☐ Calling a type using invoke()
- ☐ Any arguments that need to be passed to the method are specified in the array parameters
- ☐ The value returned by the invoked method is returned by Invoke()
- ☒ All of the mentioned

Question # 13

_____ methods are not supported for dynamic types.

Revisit

Choose the best option

- ☐ Anonymous
- ☐ Static
- ☐ Abstract
- ☒ Extension

Extension methods enable you to "add" methods to existing types without creating a new derived type, recompiling, or otherwise modifying the original type. Extension methods are static methods, but they're called as if they were instance methods on the extended type

Question # 14

How do you get information from a form that is submitted using the "post" method?

Revisit

Choose the best option

- ☐ Request.QueryString
- ☒ Request.Form
- ☐ Response.write
- ☐ Response.writeIn

Question # 15

The reason that C# does not support multiple inheritances is because of _____.

Revisit

Choose the best option

- ☒ Method collision
- ☐ Name collision
- ☐ Function collision
- ☐ Interface collision

Question # 16

Which among the following is not a type of contract in wcf?

Revisit

Choose the best option

- ☐ Service Contract
- ☐ Operation Contract
- ☒ Security Contract
- ☐ None of the above

Question # 17

Choose the incorrect statement about delegates?

Choose the best option

- ☒ delegates are not type safe
- ☐ delegates can be used to implement callback notification
- ☐ delegate is a user defined type
- ☐ delegates permits execution of a method in an asynchronous manner

A delegate is a type that represents references to methods with a particular parameter list and return type. When you instantiate a delegate, you can associate its instance with any method with a compatible signature and return type. You can invoke (or call) the method through the delegate instance.

Delegates are used to pass methods as arguments to other methods. Event handlers are nothing more than methods that are invoked through delegates. You create a custom method, and a class such as a windows control can call your method when a certain event occurs.

```
public delegate int PerformCalculation(int x, int y);
```

In the context of method overloading, the signature of a method does not include the return value. But in the context of delegates, the signature does include the return value. In other words, a method must have the same return type as the delegate.

Question # 18

The _____ keyword is new to C# 4.0, and is used to tell the compiler that a variable's type can change or that it is not known until runtime.

Revisit

Choose the best option

- ☐ Covariance
- ☒ Dynamic
- ☐ Contravariance
- ☐ Object

Delegates are similar to C++ function pointers, but delegates are fully object-oriented, and unlike C++ pointers to member functions, delegates encapsulate both an object instance and a method.
Delegates allow methods to be passed as parameters.
Delegates can be used to define callback methods.
Delegates can be chained together; for example, multiple methods can be called on a single event.
Methods don't have to match the delegate type exactly. For more information, see Using Variance in Delegates.
Lambda expressions are a more concise way of writing inline code blocks. Lambda expressions (in certain contexts) are compiled to delegate types. For more information about lambda expressions, see Lambda expressions.

Question # 19

Choose the correct statement from the following:

Choose the best option

- ☐ Indexers are location indicators
- ☐ Indexers are used to access class objects
- ☐ Indexer is a form of property and works in the same way as a property
- ☒ All of the mentioned

Question # 20

How to check Request coming from which controller using MVC ASP.Net?

Choose the best option

- ☐ var _controller =
HttpContext.Current.Request.RequestContext.Values["Controller"].ToString();
- ☒ var _controller =
HttpContext.Current.Request.RequestContext.RouteData.Values["Controller"].ToString();
- ☐ var _controller = RouteData.Values["Controller"].ToString();
- ☐ None of the above

Question # 21

Which component in Asp.net MVC can be used to pass data between controller to view ?(Assume you have to pass current date and time)

Revisit

Choose the best option

- ☒ ViewData["DateTime"]=DateTime.Now.ToString();
- ☐ ViewState["DateTime"]=DateTime.Now.ToString();
- ☐ ViewBag["DateTime"]=DateTime.Now.ToString();
- ☐ DataView["DateTime"]=DateTime.Now.ToString();

Question # 22

How to Print value from Controller to View in MVC ?

Choose the best option

- ☒ ViewBag.ECMDetail = "my message"; and in view @ViewBag.ECMDetail
- ☐ ViewBag.ECMDetail = "my message"; and in view ViewBag.ECMDetail
- ☐ ViewBag.ECMDetail = "my message"; and in view ViewBag.Title
- ☐ None of the above

Question # 23

Inheritance is _____ in nature.

Revisit

Choose the best

- ☐ Commutative
- ☐ Associative
- ☒ Transitive
- ☐ Iterative

Question # 24

Complete the following:
IsNullOrEmpty() is used to check whether the specified string is null or an Empty string. A string will be _____ if it has not been assigned a value. A string will be empty if it is assigned _____ or _____.

Revisit

Choose the best option

- ☐ null, "", String.Empty
- ☐ "", null, String.Empty
- ☐ null, String.Empty, ""
- ☐ "", String.Empty, null

Question # 25

What is the correct definition of extension methods?

Choose the best option

- ☒ The extension are static methods that allows developers to extend functionality of an existing type without creating a new derived type, recompiling, or otherwise modifying the original type and an instance methods on the extended type.
- ☐ The extension are static methods that allows developers to extend functionality of an existing type
- ☐ The extension are static methods that allows developers to extend functionality of an existing type and are instance methods.
- ☐ None of the above

21 22 23 24 25 26 27 28 29 30 <

Question # 26

What will be the output of the following C# code?

```
class Program
{
    static void Main(string[] args)
    {
        int i = 5;
        int j;
        method1(ref i);
        method2(out j);
        Console.WriteLine(i + " " + j);
    }
    static void method1(ref int x)
    {
        x = x + x;
    }
    static void method2(out int x)
    {
        x = 6;
        x = x * x;
    }
}
```

Revisit

Choose the best option

- ☐ 36, 10
- ☒ 10, 36
- ☐ 0, 0
- ☐ 36, 0

21 22 23 24 25 26 27 28 29 30 < 2

Question # 27

You are developing an ASP.NET MVC application. You create a view that will be returned by action methods in multiple controllers. You need to place the view in the appropriate folder. To which subfolder within the Views folder should you add the view?

The \Views\Shared sub-directory provides a way to store view templates that are re-used across multiple controllers within the application. When ASP.NET MVC attempts to resolve a view template, it will first check within the \Views[Controller] specific directory, and if it can't find the view template there it will look within the \Views\Shared directory.

Revisit

Choose the best option

- ☒ Shared
- ☐ Default
- ☐ Master
- ☐ None of the above

21 22 23 24 25 26 27 28 29

Question # 28

Which operator among the following signifies the destructor operator?

Revisit

Choose the best option

- ☐ ::
- ☐ :
- ☒ ~
- ☐ &

21 22 23 24 25 26 27 28 29 30 < 29 of 40 > All

Question # 29

You have declared an event on your class and you want outside users of your class to raise this event. What do you do?

Revisit

Choose the best option

- ☐ Add a public method to your class that raises the event
- ☐ Make the event public
- ☒ Use a public delegate instead of an event
- ☐ Use a custom event accessor to give access to outside users

21 22 23 24 25 26 27 28 29 30 < 30 of 40 >

Question # 30

What will be the output of the following C# code snippet?

```
class Program
{
    static void Main(string[] args)
    {
        string[] strs = {"alpha", "beta", "gamma"};
        var chrs = from str in strs
        let chrArray = str.ToCharArray()
        from ch in chrArray
        orderby ch
        select ch;
        Console.WriteLine("The individual characters in sorted order:");
        foreach (char c in chrs)
            Console.Write(c + " ");
        Console.WriteLine();
        Console.ReadLine();
    }
}
```

Revisit

Choose the best option

- ☐ a a l h a b g m m a p e t a
- ☒ a a a a a b e g h l m m p t
- ☐ a g h l m m p t a a a a b e
- ☐ Run time error

26 27 28 29 30 31 32 33 34 35 <

Question # 31

_____ parameters allow you to give a method parameter a default value so that you do not have to specify it every time you call the method.

Revisit

Choose the best option

- ☒ optional
- ☐ named
- ☐ out
- ☐ ref

26 27 28 29 30 31 32 33 34 35 < 32 of 40 > All 31

Question # 32

Consider the below scenario:
John is working as software developer for Blue Diamond Corporation, currently he is developing a web application for one of the leading retail book shop. He is using EF and LINQ to work with databases. He needs to write a LINQ query which will display all the details about books whose "Price" is greater than 50 and "QuantityInStock" should be greater than 100.
Which of the following LINQ expression will best suit his requirement?"

Revisit

Choose the best option

- ☐ var result =
from b in Books
select b
where b.QuantityInStock > 100 AND b.Price > 50.00;
- ☒ var result =
from b in Books
where b.QuantityInStock > 100 AND b.Price > 50.00
select b;
- ☐ var result =
from books b
select books
where b.QuantityInStock > 100 AND b.Price > 50.00
- ☐ var result =
from books b
where b.QuantityInStock > 100 AND b.Price > 50.00
select books

26 27 28 29 30 31 32 33 34 35 < 33 of 40 > All

Question # 33

Find the error in the below code snippet.

```
class Employee
{
    int EmpId;
    public int Employee()
    {
        EmpId = 1001;
    }
}
```

Revisit

Choose the best option

- ☐ No Error
- ☒ Return type is not possible in constructor
- ☐ Access specifier is not possible in constructor
- ☐ Constructor must have different name than class

26 27 28 29 30 31 32 33 34 35

Question # 34

Revisit

List<T>.Contains(T) method is used to check whether an element is in the List<T> or not. The return type is:

Choose the best option

- ☐ int
- ☒ Boolean
- ☐ void
- ☐ var

26 27 28 29 30 31 32 33 34 35

Question # 35

Revisit

State whether the following statements about the Microsoft Intermediate Language (MSIL) are TRUE or FALSE.

i. The MSIL code includes instructions to load, initialize and invoke methods on objects.

ii. The MSIL code is collected and assembled in the form of byte codes and is converted to a .NET assembly.

Choose the best option

- ☐ i-True, ii-False
- ☐ i-False, ii-True
- ☒ i-True, ii-True
- ☐ i-False, ii-False

31 32 33 34 35 36 37 38 39 40

Question # 36

Revisit

The infrastructure that supports dynamic operations at run time is called the _____.

The dynamic language runtime (DLR) is a runtime environment that adds a set of services for dynamic languages to the common language runtime (CLR). The DLR makes it easier to develop dynamic languages to run on the .NET Framework and to add dynamic features to statically typed languages.

The purpose of the DLR is to enable a system of dynamic languages to run on the .NET Framework and give them .NET interoperability. The DLR adds dynamic objects to C# and Visual Basic to support dynamic behavior in these languages and enable their interoperation with dynamic languages.

Choose the best option

- ☐ CLR
- ☐ CTS
- ☐ CLS
- ☒ DLR

31 32 33 34 35 36 37 38 39 40

Question # 37

Revisit

In C# which one of the following modifier do you use in a base class to require any derived class to implement a class member?

Choose the best option

- ☒ Abstract
- ☐ Virtual
- ☐ Must Override
- ☐ Sealed

Question # 38

The C# compiler used in .NET CORE is _____.

Revisit

Choose the best option

- ☐ csc.exe
- ☒ Roslyn
- ☐ Typescript
- ☐ core.exe

Common Type System (CTS) describes the datatypes that can be used by managed code. CTS defines how these types are declared, used and managed in the runtime. It facilitates cross-language integration, type safety, and high-performance code execution.

Question # 39

What is used in the following scenario :
When working with a query expression, a variable that can store the result of the sub-expression in order to reuse it in the upcoming clause.

Revisit

Choose the best option

- ☒ let
- ☐ var
- ☐ dynamic
- ☐ generic expression

```
var earlyBirdQuery =  
    from sentence in strings  
    let words = sentence.Split(' ')  
    from word in words  
    let w = word.ToLower()  
    where w[0] == 'a' || w[0] == 'e'  
        || w[0] == 'i' || w[0] == 'o'  
        || w[0] == 'u'  
    select word;
```

In a query expression, it is sometimes useful to store the result of a sub-expression in order to use it in subsequent clauses. You can do this with the let keyword, which creates a new range variable and initializes it with the result of the expression you supply.

<https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/keywords/let-clause>

Question # 40

You have to create a collection of Order objects. The collection must meet the following requirements:

Revisit

Choose the best option

- ☐ Stack<T>
- ☒ Queue<T>
- ☐ LinkedList<T>
- ☐ Dictionary<K,V>

- Use strongly typed members
- Process Order objects in first-in-first-out order.
- Store values for each Order objects
- Use Zero based indices.

Which collection type must be used to meet all the above requirements?