## Q-1. What Will Be The Output Of The Following Code Snippet:

```
using System;
public class Program
                         {
     public static void Main(string[] args){
      Console.WriteLine(Math.Round(6.5));
     Console.WriteLine(Math.Round(11.5));
     }
}
a) 6 12
b) 6 11
c) 7 12
d) 7 11
Q-2. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
      public static void Main(string[] args) {
      int[] i = new int[0];
     Console.WriteLine(i[0]);
     }
}
a) 0
b) IndexOutOfRangeException
c) Nothing is printed as array is empty
d) 1
Q-3. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program{
       public static void Main(string[] args){
        byte num = 100;
        dynamic val = num;
```

```
Console.WriteLine(val.GetType());
       val += 100;
      Console.WriteLine(val.GetType());
      }
}
a) Error
b) System.Byte
  System.Byte
c) System.Byte
  System.Int32
d) System.Int32
  System.Int32
Q-4. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program{
      public static void Main(string[] args){
     #if (!pi)
     Console.WriteLine("i");
     #else
     Console.WriteLine("PI undefined");
     #endif
     Console.WriteLine("ok");
     Console.ReadLine();
     }
}
a) ok
b) i
  ok
c) PI undefined
  ok
d) Error
Q-5. What Will Be The Output Of The Following Code Snippet:
using System;
```

```
public class Program{
     public static void Main(string[] args){
     int[] arr = new int[2];
     arr[1] = 10;
     Object o = arr;
     int[] arr1 = (int[])o;
     arr1[1] = 100;
     Console.WriteLine(arr[1]);
     ((int[])o)[1] = 1000;Console.WriteLine(arr[1]);}
}
a) 10
  10
b) 10
  100
c) 10
  1000
d) 100
  1000
Q-6. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program{
public static void Main(string[] args){
String a = "TechBeamers";
String b = "TECHBEAMERS";
int c;
c = a.CompareTo(b); Console.WriteLine(c);
 }
}
a) -1
b) 1
c) 0
d) Error
```

```
Q-7. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
static void arrayMethod(int[] a){
int[] b = new int[5];
a = b;
}
public static void Main(string[] args){
int[] arr = new int[10];
arrayMethod(arr);
Console.WriteLine(arr.Length);
}
}
a) 5
b) 10
c) 15
d) Error
Q-8. What Will Be The Output Of The Following Code Snippet:
using System;
public class Progra {
 public static void Main(string[] args)
   Program p = new Program();
   p.print(2, 3, 8);
   int[] arr = {2, 11, 15, 20};
   p.print(arr);
   Console.ReadLine();
 public void print(params int[]b) {
   foreach( int i in b){
     Console.WriteLine(i);
   }
```

```
}
a) 238
   2 11 15 20
b) 2 3 8 11 15 20
c) 2 11 15 20
d) Error
Q-9. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
 public static void Main(string[] args) {
   char x = 'A';
   int i = 0;
    Console.WriteLine(true?x:0);
   Console.WriteLine(false ? i : x);
}
a) 65
  65
b) true
  false
c) 1
d) Error
Q-10. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
 public static void Main(string[] args) {
   int num1 = 20;
    int num2 = 30;
   num1 ^= num2 ^= num1 ^= num2;
   Console.WriteLine(num1 + "," + num2);
 }
}
a) 20,30
b) 0,20
```

```
c) 20,10
d) 10,50
Q-11. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
 public static void Main(string[] args) {
   char[] num = {'1', '2', '3'};
   Console.WriteLine(" char array: " + num);
 }
}
a) char array: {123}
b) char array: [123]
c) char array: System.Char[]
d) char array: 123
Check correct answer.
Q-12. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
 public static void Main(string[] args) {
   Program obj = null;
   Console.WriteLine(Program.print());
 }
 private static String print() {
   return "Hi, I am a Tech-savvy!!";
 }
}
a) Hi, I am a Tech-savvy!!
b) Error
c) The program compiled successfully and nothing is printed
d) None of the above
Q-13. What Will Be The Output Of The Following Code Snippet:
using System;
using System.Collections.Generic;
public class Program {
```

```
public static void Main(string[] args) {
   string[] strings = {"abc", "def", "ghi"};
   var actions = new List();
   foreach(string str in strings) actions.Add(() = > {Console.WriteLine(str); });
   foreach(var action in actions) action();
 }
}
a) abc def ghi
b) ghi ghi ghi
c) abc abc abc
d) Error
Q-14. What Will Be The Output Of The Following Code Snippet:
using System; using System. Collections. Generic; public class Program
{
public static void Main(string[] args){
 var actions = new List();
for (int i = 0; i < 4; i++)
actions.Add(() => Console.WriteLine(i));
foreach (var action in actions)
 action();
 }
}
a) 0 1 2 3
b) 1 2 3 4
c) 4 4 4 4
d) Error
Q-15. What Will Be The Output Of The Following Code Snippet:
using System;
using System.Collections.Generic;
namespace TechBeamers
 delegate string del(string str); class sample {
 public static string DelegateSample(string a) {
   return a.Replace(',', '*');
 }
```

```
}
  public class InterviewProgram {
   public static void Main(string[] args) {
     del str1 = new del(sample.DelegateSample);
     string str = str1("Welcome, friends, to, TechBeamers");
     Console.WriteLine(str);
   }
 }
}
a) Welcome, friends, to, Tech Beamers
b) Welcome**friends**to**TechBeamers
c) Welcome*friends*to*TechBeamers
d) Welcome friends to TechBeamers
Q-16. What Will Be The Output Of The Following Code Snippet:
using System;
using System.Collections.Generic;
namespace TechBeamers
{
  public delegate void sampleDelegate ( int num);
  public class testDelegate {
   public void checkEven(int num) {
     if (num % 2 == 0) Console.WriteLine("This number is an even number");
     else Console.WriteLine("This number is an odd number");
   }
   public void squareNumber(int num) {
     Console.WriteLine("Square of this number is: {0}", num * num);
   }
  }
  class sample {
   public static void Main() {
     testDelegate obj = new testDelegate();
     sampleDelegate delegateObj = new sampleDelegate(obj.checkEven);
     delegateObj += new sampleDelegate(obj.squareNumber);
     delegateObj(25);
   }
 }
a) Error
b) This number is an odd number
```

- c) Square of this number is: 625
- d) This number is an odd number **Square of this number is: 625**

```
Check correct answer.
Q-17. What Will Be The Output Of The Following Code Snippet:
using System;
using System.Collections.ObjectModel;
using System.Collections.Generic;
public class Program {
  public static void Main() {
    var arr = new List {
      20, 40, 35, 85, 70
   };
    var collection = new Collection(arr);
    arr.Add(60);
    arr.Sort();
   Console.WriteLine(String.Join(",", collection));
 }
}
a) 20, 40, 35, 85, 70
b) 20, 40, 35, 85, 70, 60
c) 20, 35, 40, 60, 70, 85
d) 20, 35, 40, 60, 70
Check correct answer.
Q-18. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
  public static void Main() {
    Nullable number = 0;
    int num = 1;
    Console.WriteLine(number.GetType() == num.GetType());
 }
}
a) True
b) False
```

```
c) Null
d) Error
Q-19. What Will Be The Output Of The Following Code Snippet:
using System;
using System.Collections.ObjectModel;
using System.Collections.Generic;
namespace TechBeamers
{
  delegate void A (ref string str);
  public class sample {
    public static void StringMarker(ref string a) {
      a = a.Substring(0, a.Length - 6);
   }
  } public class Program {
  public static void Main(string[] args) {
   string str = "Let's Learn CSharp";
   str1 = sample.StringMarker;
    str1(ref str); Console.WriteLine(str);
 }
}
}
a) Learn CSharp
b) Let's Learn
c) Let's Learn CSharp
d) Null
Check correct answer.
Q-20. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
  public static void Main(string[] args) {
    bool a = true;
    bool b = false;
    a ^= b:
    Console.WriteLine(a);
    Console.ReadLine();
 }
}
```

```
a) True
b) False
c) Null
d) Error
Q-21. What Will Be The Output Of The Following Code Snippet:
using System;public class Program {
 public static void Main(string[] args){
 bool a = true;
 bool b = false;
 a |= b;
Console.WriteLine(a);
Console.ReadLine();
}
}
a) True
b) False
c) Null
d) Error
Q-22. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
 public static void Main() {
   classA a = new classC();
   Console.WriteLine(a.Print());
 }
 public class classA {
   public virtual string
   Print() {
     return "classA";
```

```
}
  public class class B: class A
 {
   public override string Print() {
   return "classB";
 }
 public class classC :classB
   public new string Print() {
   return "ClassC";
}
a) ClassA
b) ClassB
c) ClassC
d) Error
Check correct answer.
Q-23. What Will Be The Output Of The Following Code Snippet:
using System;
public 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) C A
b) C A B
c) B
d) NullReferenceException: C
Check correct answer.
Q-24. What Will Be The Output Of The Following Code Snippet:
using System;
namespace TechBeamers
  class sample {
   public int x;
   private int y;
   public void assign(int a, int b) {
      x = a + 1;
     \mathbf{v} = \mathbf{b};
   }
  }
  public class Program {
   public static void Main(string[] args) {
      sample s = new sample();
      s.assign(1, 1);
      Console.WriteLine(s.x + " " + s.y);
   }
 }
}
a) 2 1
b) 1 1
c) Compilation error (y is inaccessible due to its protection level)
d) program compiled successfully and nothing is printed
Q-25. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
  public static void Main(string[] args) {
    int n = 5;
    int x = 4:
    int z, c, k;
```

```
z = 3 * x * x + 2 * x + 4 / x + 8;
   for (c = 1; c \le n; c++) {
     for (k = 1; k \le c; k++) {
       Console.Write(Convert.ToString(Convert.ToChar(z)));
       Z++;
     }
     Console.WriteLine("\n");
   Console.ReadLine();
 }
}
a) A
  BC
  DEF
  GHIJ
  KLMNO
b) A
  AA
  AAA
  AAAA
  AAAAA
c) A
  AB
  ABC
  ABCD
  ABCDE
d) A
  AB
  BC
  BCD
  BCDE
Q-26. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
 public static void Main(string[] args) {
   int i, j = 1, k;
   for (i = 0; i < 5; i++) {
     k = j+++++j;
     Console.Write(k + " ");
   }
```

```
}
a) 8 4 16 12 20
b) 4 8 12 16 20
c) 2 4 6 8 10
d) 4 8 16 32 64
Q-27. What Will Be The Output Of The Following Code Snippet:
using System;
namespace TechBeamers
{
 class Sample {
   public int num;
   public int[] arr = new int[10];
   public void assign(int i, int val) {
      arr[i] = val;
   }
  }
  class Program {
   static void Main(string[] args) {
      Sample s = new Sample();
      s.num = 100;
      Sample.assign(0, 10);
      s.assign(0, 9);
     Console.WriteLine(s.arr[0]);
   }
 }
}
a) 10
b) 9
c) Compilation Error: an object reference required to access non-static member
d) 100
Q-28. What Will Be The Output Of The Following Code Snippet:
using System;
class Program {
  static void Main(string[] args) {
   String s1 = "TechBeamers";
   String s2 = "Welcomes its readers";
```

```
String s3 = s2;
    Console.WriteLine((s3 == s2) + "" + s2.Equals(s3));
    Console.ReadLine();
 }
}
a) True True
b) True False
c) False True
d) False False
Q-29. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
  static void Main(string[] args) {
    string str = "100p";
    int i = 0;
    if (int.TryParse(str, out i)) {
      Console.WriteLine("Yes string contains Integer and it is " + i);
   } else {
      Console.WriteLine("string does not contain Integer");
   }
 }
}
a) Yes string contains Integer and it is 100
b) string does not contain Integer
c) Error
d) Null
Q-30. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
  public static void Main() {
    int[] arr = {1, 2, 3};
    int i = 1;
    arr[i++] = arr[i] + 10;
    Console.WriteLine(String.Join(",", arr));
 }
}
a) 1,13,3
b) 1,2,3
```

```
c) 11,12,13
d) 10,20,30
Check correct answer.
TOP
Q-31. What Will Be The Output Of The Following Code Snippet:
using System;
class Program {
 public static int i = 0;
  public static void Main() {
    (i++).Assign();
 }
}
static class Extensions {
 public static void Assign(this int i) {
    Console.WriteLine(Program.i);
    Console.WriteLine(i);
 }
}
a) 10
b) 1 1
c) 0 1
d) 0 0
Check correct answer.
Q-32. What Will Be The Output Of The Following Code Snippet:
using System;
class Program {
  enum Color:int
   red, green, blue = 5, cyan, magenta = 10, yellow
 public static void Main() {
    Console.WriteLine((int) Color.green + ", ");
```

```
Console.WriteLine((int) Color.yellow);
 }
}
a) 4,11
b) 1,11
c) 4,7
d) 1,7
Q-33. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
  public static void Main(string[] args) {
   int i = 3;
   int j = 2;
   func1(ref i); func2(out j); Console.WriteLine(i + " " + j);
  static void func1(ref int num) {
    num = num + num;
 }
  static void func2(out int num) {
    num = num * num;
 }
}
a) 6 4
b) Compilation error: usage of unassigned out parameter
c) 3 2
d) Compilation Error: function call without creating an object
Check correct answer.
Q-34. What Will Be The Output Of The Following Code Snippet:
using System;
class Program {
  public static void Main() {
    var test = SingletonB.Test;
 }
}
```

```
class SingletonB {
  static readonly SingletonB
  _instance = new
  SingletonB();
  public static SingletonB Test
  {
   get {
    return _instance;
  }
  private SingletonB() {
   Console.WriteLine("Default Constructor");
  }
  static SingletonB() {
    Console.WriteLine("Static Constructor");
 }
}
a) Static Constructor
b) Program compiles successfully and nothing is printed
c) Default Constructor
   Static Constructor
d) Default Constructor
Q-35. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
 public static void Main(string[] args) {
   try {
     Console.WriteLine("TechBeamers Welcomes Its Readers");
      Environment.Exit(0);
   } finally {
     Console.WriteLine("To the World of C#!!");
   }
 }
```

- a) TechBeamers Welcomes Its Readers
  To the World of C# !!
- b) TechBeamers Welcomes Its Readers
- c) Error: unexpected system exit
- d) Program compiles successfully and nothing is printed

## Q-36. What Will Be The Output Of The Following Code Snippet: using System;

```
public class Calculation {
  int sum = 0;
  int count = 0;
  float average;
  public void CalAverage() {
    if (count == 0) throw (new CountIsZeroException("Zero count in DoAverage"));
      average = sum / count;
      Console.WriteLine("Program executed successfully");
   }
 }
}
public class CountIsZeroException :ApplicationException
{ public CountIsZeroException(string message) :base(message) {
}
}
class Program {
  static void Main(string[] args) {
    Calculation c = new Calculation();
    try {
      c.CalAverage();
    } catch (CountIsZeroException e) {
      Console.WriteLine("CountIsZeroException: {0}", e);
    Console.ReadLine();
 }
```

- a) CountIsZeroException: Zero count in DoAverage
- b) Compilation error :exception not handled properly

- c) CountIsZeroException : CountIsZeroException: Zero count in DoAverage
- d) Program executed successfully

Check correct answer.

**int** i = 10;

```
Q-37. What Will Be The Output Of The Following Code Snippet:
using System;

public class Program {
    static void Main(string[] args) {
        Derived d = new Derived();
    }
}
```

```
d.Func(i);
    Console.ReadKey();
 }
}
public class Base {
  public virtual
  void Func(int x) {
    Console.WriteLine("Base.Func(int)");
  }
}
public class Derived :Base
  public override void Func ( int x){
  Console.WriteLine("Derived.Func(int)");
}
  public void Func (object o){
  Console.WriteLine("Derived.Func(object)");
}
}
```

- a) Derived.Func(object)
- b) Derived.Func(int)
- c) Derived.Func(int)
  Base.Func(int)
- d) Base.Func(int)

```
Q-38. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
 public static void Main(string[] args) {
   string str1 = "TechBeamers";
   string str2 = "Techbeamers";
   if (str1 == str2) Console.WriteLine("Both Strings are Equal");
   else Console.WriteLine("Both Strings are Unequal");
   if (str1.Equals(str2)) Console.WriteLine("Both Strings are Equal");
   else Console.WriteLine("Both Strings are Unequal");
   Console.ReadLine();
 }
}
a) Both Strings are Equal
   Both Strings are Unequal
b) Both Strings are Equal
   Both Strings are Equal
c) Both Strings are Unequal
   Both Strings are Unequal
d) Both Strings are Unequal
   Both Strings are Equal
Q-39. What Will Be The Output Of The Following Code Snippet:
using System;
class Program {
 public static void Main() {
   Sample s = new Sample();
   s.Print();
   ISample i = s;
   i.Print();
 public interface ISample {
   void Print(string val ="Interface Executed");
 }
 public class Sample :ISample
 {
```

```
public void Print (string val = "Class Executed"){
   Console.WriteLine(val);
 }
}
a) Class Executed
   Interface Executed
b) Class Executed
c) Interface Executed
d) Error
Q-40. What Will Be The Output Of The Following Code Snippet:
using System;
class Program {
  public static void Main() {
    int num = 0;
    (num++);
   Console.WriteLine(num);
 }
}
a) 0
b) 1
c) Error: wrong use as statement
d) Nothing gets printed.
Check correct answer.
TOP
Q-41. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
  public static void Main(string[] args) {
   int val = (byte) +(char) -(int) +(long) -2;
    Console.WriteLine(val);
 }
a) Error
b) -2
```

```
c) 2
d) 0
Q-42. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
  public static void Main(string[] args) {
    Boolean b1 = true, b2 = false;
   if ((b2 = true) | (b1 ^ b2)) {
     Console.WriteLine("execution success");
   } else {
     Console.WriteLine("execution failure");
   }
 }
}
a) execution failure
b) execution success
c) Error
d) Null
Q-43. What Will Be The Output Of The Following Code Snippet:
using System;
class Program {
  public static void Main() {
   string str1 = "\U0010FADE";
   string str2 = "\U0000FADE";
    Console.WriteLine(str1.Length);
    Console.WriteLine(str2.Length);
 }
}
a) 9
b) 10
   10
c) 2
d) 1
   0
```

## Q-44. What Will Be The Output Of The Following Code Snippet: using System;

```
class Program {
 public static void Main() {
    int[] singleDimArray = \{1, 2, 3, 4\};
    int[,]multiDimArray = {{1, 2}, {3, 4}};
    int[][] jaggedArray = {new int[]{1, 2}, new int[]{3, 4}};
    Console.WriteLine(singleDimArray.Length);
    Console.WriteLine(multiDimArray.Length);
    Console.WriteLine(jaggedArray.Length);
 }
}
a) 442
b) 422
c) 444
d) 424
Q-45. What Will Be The Output Of The Following Code Snippet:
using System;
class Program {
 public static void Main() {
   float num = 56, div = 0;
   try {
     Console.WriteLine(num / div);
   } catch (DivideByZeroException) {
     Console.WriteLine("Division By Zero");
   }
 }
}
a) Runtime Error
b) Compile time Error
c) Division By Zero
d) Infinity
Q-46. What Will Be The Output Of The Following Code Snippet:
using System;
class Program {
 public static void Main() {
```

for (int x = 0; x < 10; x++) {

```
Console.Write(x + ' ');
   }
 }
a) 0 1 2 3 4 5 6 7 8 9
b) 0
   2
   3
   4
   5
   6
   7
  8
   9
c) 32333435363738394041
d) Compile time Error
Q-47. What Will Be The Output Of The Following Code Snippet:
using System;
class Program {
 static void Main(string[] args) {
   double num1 = 1.000001;
   double num2 = 0.000001;
   Console.WriteLine((num1 - num2) == 1.0);
 }
}
a) True
b) False
c) Null
d) Error
Check correct answer.
Q-48. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
 public Program(Object o) {
   Console.WriteLine("Object argument");
 }
```

```
public Program(double[] arr) {
   Console.WriteLine("double array argument");
 }
 public static void Main(string[] args) {
   new Program(null);
}
a) Object argument
b) double array argument
c) Object argument
  double array argument
d) The Program compiles successfully but nothing gets printed.
Check correct answer.
Q-49. What Will Be The Output Of The Following Code Snippet:
using System;
public class Program {
       public static void Main(string[] args){
       Console.WriteLine("H" + 'I');
       Console.WriteLine('h' + 'i');
       }
}
a) HI
  hi
b) 145
  209
c) HI
  209
d) 145
  hi
```

Check correct answer.

## Q-50. What Will Be The Output Of The Following Code Snippet:

using **System**; using System.Text;

```
public class Program {
  public static void Main(string[] args) {
   String str = "";
    StringBuilder sb1 = new StringBuilder("TechBeamers");
    StringBuilder sb2 = new StringBuilder("TechBeamers");
    StringBuilder sb3 = new StringBuilder("Welcome");
    StringBuilder sb4 = sb3;
    if (sb1.Equals(sb2)) str += "1";
    if (sb2.Equals(sb3)) str += "2";
    if (sb3.Equals(sb4)) str += "3";
    String str1 = "TechBeamers";
    String str2 = "Welcome";
    String str3 = str2;
    if (str1.Equals(str2)) str += "4";
    if (str2.Equals(str3)) str += "5";
    Console.WriteLine(str);
 }
}
a) 12345
b) 135
c) 1345
```

d) Nothing gets printed