USM's Shriram Mantri Vidyanidhi Info Tech Academy
PG DAC Sept 21 Microsoft .NET Question Bank

Contents

Frame work

1) Choose right option ('s) below statements about the .NET CLR?

1.   Common Language Runtime provides a language-neutral development and execution environment.

2.   Common Language Runtime ensures that an application would not be able to access memory that it is not authorized to access.

3.   Common Language Runtime provides services to run managed applications.

4.   Common Language Runtime The resources are garbage collected.

5. Common Language Runtime provides services to run "unmanaged" applications.

a. Only 1 and 2   b. Only 1, 2 and 4   c. **1, 2, 3, 4**   d. Only 4 and 5

2) What is true about Managed Code (MC)?

a. Managed code(MC) is compiled by the JIT(Just In Time) compilers

b. Managed code(MC) where resources are Garbage Collected(GC)

c. Managed code (MC) runs on top of Windows OS.

d. Managed code (MC) written to target the services of the Common Language Runtime (CLR).

3) Dot Net Framework consists of:

a. Common language runtime   b. Set of class libraries

c. Common language runtime and set of class libraries   d. None of above

4) Which of the following statements are correct about JIT?

1. JIT compiler compiles instructions into machine code at run time.

2. The code compiler by the JIT compiler runs under CLR.

3. The instructions compiled by JIT compilers are written in native code.

4. The instructions compiled by JIT compilers are written in Intermediate Language (IL) code

a. 1, 2, 3   b. 2, 4   c. 3, 4   d. 1, 2

5) Which of the following is the root of the .NET type hierarchy?

a. System.Type   b. System. Parent   c. System.Base   **d. System. Object**

6) Code that targets the Common Language Runtime is known as

a. unmanaged   b. Distributed   c. Native Code   **d. Managed Code**

7) Which of the following statements correctly define .NET Framework?

a. It is an environment for developing, building, deploying and executing Desktop Applications, Web Applications and Web Services.

b. It is an environment for developing, building, deploying and executing only Web Applications.

c. It is an environment for developing, building, deploying and executing Distributed Applications.

d. It is an environment for developing, building, deploying and executing Web Services.

8) How many types of JIT compilers available under CLR?

a. 4   b. 2   c. 1   **d.3**

9) Which of the following statements is correct about Managed Code?

a. Managed code is the code that is compiled by the JIT compilers.

b. Managed code is the code where resources are Garbage Collected.

c. Managed code is the code that runs on top of Windows.

d. **All of above**

10) Name Type of assembly

 a. Private, shared assembly   b. Public, protected assembly   c. All the above   d. None

11) In Shared Assembly every project will have local copy

a. True   **b. False**

12) In Private Assembly every project will have local copy
a. True   b. False

13) For shared Assembly you have to generate Strong name
a. True   b. False

14) Strong Name includes the
a. only name of the .net assembly,   b. only version number,
c. culture identity, and a public key token   **d. all the above**

15) Shared Assemblies are installed at:
a. System Assembly Cache   **b. Global Assembly Cache**
c. Machine Assembly Cache   d. Windows Assembly Cache

16) To create a key pair command is

a. sn –k   b. sn-k   c. ns –k   d. none

17) Command to move dll file in shared location

a. gacutil/i dllfilename   b. gc   c. gautyil/I   d. none

1) .entrypoint
    .maxstack 3
    .locals ([0] int32 ValueOne,
[1] int32 ValueTwo,
[2] int32 V_2,
[3] int32 V_3)
    IL_0000: ldc.i4.s   10
    IL_0002: stloc.0
    IL_0003: ldc.i4.s   20
    IL_0005: stl

Net frame work

a. **MSIL code**   b. Metadata
c. Assembly Manifest   d. Module Manifest   e. C#

2) From which one of the following locations does the garbage collector remove objects?
a. The system registry   b. The thread stack   c. **The managed heap**
d. The global assembly cache   e. The download cache

3) How does .NET Framework alleviate "DLL Hell"?

a. The Common Language Runtime (CLR) and Assemblies specify and enforce versioning rules and allow side-by-side execution of a software component

b. The Common Language Runtime (CLR) only allows a single version of a component to be registered in the Global Assembly Cache (GAC).

c. The Common Language Runtime (CLR) does not allow administrators to change the version of a component that an Assembly references externally.

d. The Common Language Runtime (CLR) and Assemblies can only use the version of a component with which they were compiled.

4) John wants to look at a human readable representation of the metadata and intermediate language (IL) code contained in a .NET Portable Executable (PE) file. Given the above scenario, what tool from the .NET SDK should John use?

a. ilasm.exe   b**. ildasm.exe**   c. al.exe   d. dumpbin.exe

5)   What is the relationship between Common Type System (CTS) and Common Language Specification (CLS)?

a. NET Languages each offer a subset of the CTS and a superset of the CLS.

b. NET Languages each offer a superset of the CTS and a subset of the CLS.

c. NET Languages each offer either the CTS set or the CLS set.

d. NET Languages all offer the same superset of the CTS.

6) Where is the Class Loader located?

a. **In the Common Language Runtime's (CLR) Virtual Execution Engine**

b. In the .NET source code compiler

c. In the Portable Executable File

d. In the host operating system

e. In the Global Assembly Cache (GAC)

7) Which one of the following creates the metadata tables contained in a PE file?

a. **Source code compiler**   b. JIT Compiler   c. Class Loader   d. Verifier

8) Which one of the following describes the Application Base property?

a. Source code compiler   **b. JIT Compiler**   c. Class Loader   d. Verifier

9) Which one of the following statements is true about MSIL code?

a. It is source code-specific.

b. It is architecture-specific.

c. **It is compiled to native code by JIT compilers.**

d. It is only stored in assembly resource files.

e. It is only found in static assemblies.

10) Which one of the following statements is true regarding how the .NET Framework minimizes "DLL Hell"?

a. It enforces that only one component of a given name can run on a machine at a time.

b. It only allows multiple versions of a given component to run on a machine at a time if they all are private assemblies.

c. **It allows side-by-side execution on the same machine, at the same time, or even the same process, of any version of the same shared DLL.**
d. It registers all assemblies with the COM+ catalog.
e. It registers all assemblies with the Global Assembly Cache (GA

11) _____ is collection of reusable classes or type.
a. **Base Class Library**   b. File Library   c. Both a and b are true   d. None of the above

12) The common language runtime can be thought of as the environment that manages code execution. It provides core services, such as_____

a. code compilation   b. memory allocation
c. thread management, and garbage collection   d. **All of the Above**

13) The .NET Framework is designed for cross-language compatibility, which means, simply, that .NET components can interact with each other no matter what supported language they were written in originally.
a. **This level of cross-language compatibility is possible because of the common language runtime.**
b. This level of cross-language compatibility is possible because of the common Type System
c. This level of cross-language compatibility is possible because of the Common Language Specification
d. d. None of the above

14) Statement A: The Common Language Specification (CLS) defines the minimum
A. standards to which .NET language compilers must conform. Statement B: CLS ensures that any source
B. code successfully compiled by a .NET compiler can interoperate with the .NET Fram
a. Statement A is True   b. Statement B is true
c. **Both Statements are True**   d. None of the above

C# Basic

1) How many Bytes are stored by 'Long' Datatype in C# .net?
a. 8   b. 4   c. 2   d. 1

2) Correct Declaration of Values to variables 'a' and 'b'?
a. int a = 32, b = 40.6;   b. int a = 42; b = 40;   **c. int a = 32; int b = 40;**   d. int a = b = 42;

3) Arrange the following datatype in order of increasing magnitude sbyte, short, long, int.
a. long < short < int < sbyte   **b. sbyte < short < int < long**
c. Short < sbyte < int < long   d. short < int < sbyte < long

4) Which datatype should be more preferred for storing a simple number like 35 to improve execution speed of a program?
a. sbyte   b. short   c. int   d. long

5) Which Conversion function of 'Convert.TOInt32 ()' and 'Int32.Parse ()' is efficient?
1) Int32.Parse () is only used for strings and throws argument exception for null string

2) Convert.Int32 () used for datatypes and returns directly '0' for null string

a. 2   b. Both 1, 2   c. 1   d. None of the mentioned

6) What is the Size of 'Char' datatype?

a. 8 bit   b. 12 bit   **c. 16 bit**   d. 20 bit

7) Select output for the following set of code.

```
1.  static void Main(string[] args)
2.  {
3.  int a = 5;
4.  int b = 10;
5.  int c;
6.  Console.WriteLine(c = ++ a + b ++);
7.  Console.WriteLine(b);
8.  Console.ReadLine();
9.  }
```

a. 11, 10   b. 16, 10   **c. 16, 11**   d. 15, 11

Enum

1) Which among the following cannot be used as a datatype for an enum in C#.NET?

a. short   **b. double**   c. int

2) *Choose the correct output for the C#.NET code given below?*

```
1.  enum days: int
2.  {
3.  sunday = −3,
4.  monday,
5.  tuesday
6.  }
7.  Console.WriteLine((int)days.sunday);
8.  Console.WriteLine((int)days.monday);
9.  Console.WriteLine((int)days.tuesday);
```

$a) -3\ 0\ 1$ $b)\ 0\ 1\ 2$ $c) -3\ -2\ -1$ $d)$ *sunday monday tuesday*

3) *Choose the correct output for given set of code?*

```
1. enum color: int
2. {
3. red,
```

4. $green,$

5. $blue = 5,$

6. $cyan,$

7. $pink = 10,$

8. $brown$

9. $\}$

10. $console.writeline((int)color.green);$

11. $console.writeline((int)color.brown);$

$a) \, 2 \, 10$
$b) \, 2 \, 11$ $\boldsymbol{c)} \, \boldsymbol{1} \, \boldsymbol{11}$ $d) \, 1 \, 5$

4) *Correct the output for the C#.NET code given below?*

1. $enum \, letters$

2. $\{$

3. $a,$

4. $b,$

5. c

6. $\}$

7. $letters \, l;$

8. $l = letters.a;$

9. $Console.writeline(l); \quad advertisements$

$a) - 1$

$b) \, 0$ $\boldsymbol{c)} \, \boldsymbol{a}$

Structure $d)$ *letters. a*

1) *Which of the following is a correct statement about the C#.NET code given below?*

1. `struct book`
2. `{`
3. `private String name;`
4. `private int pages;`
5. `private Single price;`
6. `}`
7. `book b = new book();`

a. New structure can be inherited from struct book
b. When the program terminates, variable b will get garbage collected

c. **The structure variable 'b' will be created on the stack**

d. When the program terminates, variable b will get garbage collected

2) Choose the correct statement about structures in C#.NET?
   a. Structures can be declared within a procedure
   b. **Structures can implement an interface but they cannot inherit from another structure**
   c. Structure members cannot be declared as private
   d. a structure can be empty

3) When does a structure variable get destroyed?

a. When no reference refers to it, it will get garbage collected

b. Depends on whether it is created using new or without new operator

c. **As variable goes out of the scope**

d. Depends on either we free its memory using free() or delete()

Polymorphisms

1) The capability of an object in Csharp to take number of different forms and hence display behaviour as according is known as:

a. Encapsulation   **b. Polymorphism**   c. Abstraction   d. None of the mentioned

Inheritance

1) Which procedure among the following should be used to implement a 'Is a' or a 'Kind of' relationship between two entities?

a. Polymorphism   **b. Inheritance**   c. Templates

2) 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

3) which form of inheritance is not supported directly by C# .NET?

a. Multiple inheritance   b. Multilevel inheritance

c. Single inheritance   d. Hierarchical inheritance

5) If no access modifier for a member of a class is specified, then class member accessibility is defined as?

a. Public   b. protected   **c. private**   d. internal

6) using System;
   class shape
{
  public int H;   public int W;   public shape(int h, int w)
{ H = h;

```
        W = w;
    }
    public double area()
    { return 0;    }
}
    class rectangle :shape
    { public rectangle(int p, int q) : base(p, q) { }        public double area()
      { return H * W;      }
    }
  class triangle:shape
  { public triangle(int p, int q) : base(p, q) { }        public double
area()         { return (H * W)/2.0;      }
  }
  class Program
  {  static void Main(string[] args)
    { shape s1 = new triangle(5, 5);
Console.WriteLine (s1.area());        shape s2 = new rectangle
(5, 5);        Console.WriteLine(s2.area());
      Console.ReadLine ();      }
  }
```

What will be the output

a. 0, 0   b. 25,12   c. 12.00   d. None


```
7) using System;    class shape    { public
    int H;        public int W;
        public shape(int h, int w)
        {    H = h;
          W = w;    }        public virtual double
    area()
        {    return 0;    }
      }
        class rectangle :shape
        { public rectangle(int p, int q) : base(p, q) { }        public
    double area()
        { return H * W;      }
        }
      class triangle:shape
      {
        public triangle(int p, int q) : base(p, q) { }        public
    double area()        { return (H * W)/2.0;      }
      }
      class Program
      { static void Main(string[] args)
        {    shape s1 = new triangle(5, 5);
```

```
Console.WriteLine (s1.area());          shape s2 = new rectangle
(5, 5);
        Console.WriteLine(s2.area());
        Console.ReadLine ();
    }



    }
```

a. 25,12.00   b.12.05,25   c.0,0   d. None

8) using System; using System.Collections.Generic;
```
    class shape     {  public int H;        public int W;
    public shape(int h, int w)
        {   H = h;
            W = w;     }        public virtual double
    area()
        {       return 0;      }
    }
        class rectangle :shape
        { public rectangle(int p, int q) : base(p, q) { }          public
    override double area()
            {  return H * W;      }
        }
    class triangle:shape
    { public   triangle(int p, int q) : base(p, q) { }         public
    override double area()
        {  return (H * W)/2.0;      }
    }
    class Program
    {   static void Main(string[] args)
        {   shape s1 = new rectangle(5, 5);
    Console.WriteLine (s1.area());          shape s2 = new
    triangle(6, 6);          Console.WriteLine(s2.area());
        Console.ReadLine ();
    }
    }
```
a. 0, 25   b. 25, 18   c.25, 18.000000   d.0

8) using System;
```
    namespace ConsoleApplication7
    {
      abstract class shape
      {
        public int H;        public int W;
```

```csharp
public shape(int h, int w)
    {   H = h;
        W = w;      }        public virtual double
area()
    {       return 0;      }
  }
  class rectangle :shape
    { public rectangle(int p, int q) : base(p, q) { }        public
double area()
      { return H * W;      }
    }
  class triangle:shape
  {
    public   triangle(int p, int q) : base(p, q) { }        public  double
area()        { return (H * W)/2.0;      }
  }
  class Program
  {
    static void Main(string[] args)       {   shape s1 =
new rectangle(5, 5);         Console.WriteLine
(s1.area());         shape s2 = new triangle (6, 6);
      Console.WriteLine(s2.area());
      Console.ReadLine ();
    }   }
```

a.**0,0**   b.25,1   c. 15,18.000000   d. none

9) using System; using
System.Collections.Generic;
namespace ConsoleApplication7
{
  abstract class shape   {   public int H;
public int W;
    public shape(int h, int w)
    {   H = h;
        W = w;   }   public abstract
double area();   }
    class rectangle :shape
    { public rectangle(int p, int q) : base(p, q) { }
public override double area()   { return H * W;   }
    }
  class triangle:shape
  { public   triangle(int p, int q) : base(p, q) { }   public
override double area()
    { return (H * W)/2.0;   }
  }

```
    class Program
    { static void Main(string[] args)
      {   shape s1 = new rectangle (5, 5);
Console.WriteLine (s1.area());          shape s2 = new
triangle (6, 6);
        Console.WriteLine(s2.area());
        Console.ReadLine ();
      }
    }
```
a. 25, 18   b. 0, 0   c. 0, 15   d. None

Method Overloading

1) The process of defining two or more methods within the same class that have same name but different parameters list?
a) Method overloading   b) method overriding   c) Encapsulation   d) None of the mentioned

2) Which of these can be overloaded?
a) Constructors   b) Methods   **c) Both a & b**   d) None of the mentioned

3) What is the process of defining a method in terms of itself that is a method that calls itself?
a) Polymorphism   b) Abstraction   c) Encapsulation   **d) Recursion**

4) What could be the output of the following set of code?
1. class Program
2. {
3. static void Main(string[] args)
4. {
5. Console.WriteLine(vol(10));
6. Console.WriteLine(vol(2.5f, 5));
7. Console.WriteLine(vol(5l, 4, 5));
8. Console.ReadLine();
9. }
10. static int vol(int x)
11. {
12. return(x * x * x);
13. }
14. static float vol(float r, int h)
15. {
1. return(3.14f * r * r * h);
2. }
3. static long vol(long l, int b, int h)

4. {
5. return(l * b * h);
6. }
7. }

a) 1000 0 100   b) 0 0 100   c) compile time error   **d) 1000 98.125 100**

5) What could be the output for the set of code?

1. class overload
2. {
3. public int x;
4. int y;
5. public int add(int a)
6. {
7. x = a + 1;
8. return x;
9. }
10. public int add(int a, int b)
11. {
12. x = a + 2;
13. return x;
14. }
15. }
16. class Program
17. {
18. static void Main(string[] args)
19. {
20. overload obj = new overload();
21. overload obj1 = new overload();
22. int a = 0;
23. obj.add(6);
24. obj1.add(6, 2);
25. Console.WriteLine(obj.x);
26. Console.WriteLine(obj1.x);
27. Console.ReadLine();
28. }
29. }

a) 8 8   b) 0 2   c) 8 10   **d) 7 8**

6) What will be the output for the set of code?

1. static void Main(string[] args)
2. {
3. int i = 5;

4. int j = 6;

5. add(ref i);

6. add(6);

7. Console.WriteLine(i);

8. Console.ReadLine();

9. }

10. static void add(ref int x)

11. {

12. x = x * x;

13. }

14. static void add(int x)

15. {

16. Console.WriteLine(x * x * x);

17. }

a) Compile time error   b) 25 0   c) 216 0   **d) 216 25**

Over rider

4) What will be the output for the given set of code?

```
class A
{
   public virtual void display()
   {
      Console.WriteLine("A");
   }
```

1) Which keyword is used to declare a base class method while performing overriding of base class methods?

a) This   **b) virtual**   c) override   d) extend

2. The process of defining a method in subclass having same name & type signature as a method in its superclass is known as?

a) Method overloading   **b) Method overriding**   c) none of the mentioned

3) Which of the given modifiers can be used to prevent Method overriding?

a) Static   b) Constant   **c) Sealed**   d) final

```
}
class B: A
{
   public override void display()
   {
      Console.WriteLine(" B ");
   }
}
```

```
class Program
{
    static void Main(string[] args)
    {
A obj1 = new A();
B obj2 = new B();
        A r;
r = obj1;
        r.display();
r = obj2;
        r.display();
        Console.ReadLine();
    }
}
```

a) A, A   b) B, B   c) Compile time error   **d) A, B**

5) The modifier used to hide the base class methods is?

a) Virtual   **b) New**   c) Override   d) Sealed

6) What will be the output for the given set of code?

```
class a
{
    public  void fun()
    {
        Console.WriteLine("base method");
    }
}
class b: a
{
    public new void fun()
    {
        Console.WriteLine(" derived method ");
    }
}
class Program
{
    static void Main(string[] args)
    {
        b k = new b();
k.fun();
        Console.ReadLine();
    }
}
```

a) base method   **b) derived method**
c) Code runs successfully prints nothing   d) Compile time error

7) What will be the output for the given set of code?

```
class A
{
    public virtual void display()
    {
        Console.WriteLine("A");
    }
}
class B: A
{
    public override void display()
    {
        Console.WriteLine(" B ");
    }
}
class Program
{
    static void Main(string[] args)
    {
A obj1 = new A();
B obj2 = new B();
        A r;
r = obj1;
        r.display();
r = obj2;
        r.display();
        Console.ReadLine();
    }
}
```

a) A, A   b) B, B   c) Compile time error   **d) A, B**

Constructor Overloading

1) What will be the output of the given set of code?

1. class maths
2. {
3. public int length;
4. public int breadth;
5. public maths(int x, int y)
6. {
7. length = x;
8. breadth = y;

```
9.  Console.WriteLine(x + y);
10. }
11. public maths(double x, int y)
12. {
13. length = (int)x;
14. breadth = y;
15. Console.WriteLine(x * y);
16. }
17. }
18. class Program
19. {
20. static void Main(string[] args)
21. {
22. maths m = new maths(20, 40);
23. maths k = new maths(12.0, 12);
24. Console.ReadLine();
25. }
26. }
```

a) 60, 24   b) 60, 0   **c) 60, 144**   d) 60, 144.0

2) What will be the output of the given set of code?

```
1.  class maths
2.  {
3.  public int length;
4.  public int breadth;
5.  public  maths(int x)
6.  {
7.  length = x + 1;
8.  }
9.  public maths(int x, int y)
10. {
11. length = x + 2;
12. }
13. }
14. class Program
15. {
16. static void Main(string[] args)
17. {
18. maths m = new maths(6);
19. maths k = new maths(6, 2);
20. Console.WriteLine(m.length);
21. Console.WriteLine(k.length);
```

```
22. Console.ReadLine();
23. }
24. }
```

a) 8, 8   b) 0, 2   c) 8, 10   **d) 7, 8**

3) What will be the output of the given set of code?

```
1.  class maths
2.  {
3.  int i;
4.  public maths(int x)
5.  {
6.  i = x;
7.  Console.WriteLine(" hello: ");
8.  }
9.  }
10. class maths1 : maths
11. {
12. public  maths1(int x) :base(x)
13. {
14. Console.WriteLine("bye");
15. }
16. }
17. class Program
18. {
19. static void Main(string[] args) 20. {
21. maths1 k = new maths1(12);
22. Console.ReadLine();
23. }
24. }
```

a) hello bye   b) 12 hello   `c) bye 12   d) Compile time error

Property getset

1) Select the correct statement about properties of read and write in C#.NET?

a) A property can simultaneously be read or write only

b) A property can be either read only or write only

c) A write only property will only have get accessor

d) A read only property will only have set accessor

2) What will be the output of the following snippet of code?

```
1.  class number
2.  {
```

```
3.   int length = 50;
4.   public int number1
5.   {
6.   get
7.   {
8.   return length;
9.   }
10. set
11. {
12. length = value;
13. } 14. }
15. }
16. class Program
17. {
18. public static void Main(string[] args)
19. {
20. number p = new number();
21. p.number1 = p.number1 + 40;
22. int k = p.number1 * 3 / 9;
23. Console.WriteLine(k);
24. Console.ReadLine();
25. }
26. }
```

a) 0   b) 180   **c) 30**   d) Compile time error

3) What will be the output of the following snippet of code?

```
1.   class number
2.   {
3.   int length = 60;
4.   public int number1
5.   {
6.   get
7.   {
8.   return length;
9.   }
10. }
11. }
12. class Program
13. {
14. public static void Main(string[] args)
15. {
16. number p = new number();
```

17. int l;
18. l = p.number1 + 40;
19. int k = l * 3 / 4;
20. Console.WriteLine(k);
21. Console.ReadLine();
22. }
23. }

a) 30   **b) 75**   c) 80   d) 0

4) What will be the output of following snippet of code?

```
1.  class number
2.  {
3.  private int num1;
4.  private int num2;
5.  public int anumber
6.  {   get
7.  {        return num1;      }
8.  set
9.  {        num1 = value;     }
10. }
11. public int anumber1
12. {
13. get
14. {     return num2;      }
15. set
16. {    num2 = value;        }
17. }
18. }
19. class Program
20. {
21. public static void Main(string[] args)
22. {
23. number p = new number();
24. p.anumber = 20;
25. number k = new number();
26. k.anumber1 = 40;
1.  int m = p.anumber;
2.  int t = k.anumber1;
3.  int r = p.anumber + k.anumber1;
4.  Console.WriteLine("number = " +m);
5.  Console.WriteLine("number = " +t);
6.  Console.WriteLine("sum = " +r);
```

7.   Console.ReadLine();

8.   }

9.   }

a) 0   b) Compile time error   c) 60   **d) none of the above mentioned**

5) 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

6) Consider a class maths and we had a property called as sum. b which is the reference to a maths object and we want the statement Console. WriteLine (b.sum) to fail. Which among the following is the correct solution to ensure this functionality?

a) Declares sum property with only get accessor

b) Declares sum property with only set accessor

c) Declares sum property with both set and get accessor

d) Declares sum property with both set, get and normal accessor

7. Consider a class maths and we had a property called as sum.b is a reference to a maths object and we want the code below to work. Which is the correct solution to ensure this functionality? b. maths = 10; Console. WriteLine(b.maths);

a) Declare maths property with get and set accessors

b) Declare maths property with only get accessors

c) Declare maths property with only set accessors

d) Declare maths property with only get, set and normal accessors

Interface

1) Which statement correctly defines Interfaces in C#.NET?

a) Interfaces cannot be inherited

b) Interfaces consists of data static in nature and static methods

c) Interfaces consists of only method declaration

d) **None of the mentioned**

2) A class consists of two interfaces with each interface consisting of three methods. The class had no instance data. Which of the following indicates the correct size of object created from this class?

a) 12 bytes   b) 16 bytes   c) 0 bytes   **d) 24 bytes**

3) Select the correct statement among the given statements?

a) One class could implement only one interface

b) Properties could be declared inside an interface

c) Interfaces cannot be inherited
d) None of the above mentioned

4) Which of the following is the correct way of implementing an interface addition by class maths?
a) class maths : addition {}   b) class maths implements addition {}
c) class maths imports addition {}   d) None of the mentioned

5) Does C#.NET support partial implementation of interfaces?
a) True   **b) False**   c) Can't Say   d) None of the above mentioned

6) Access specifiers which can be used for an interface are?
a) Public   b) Protected   c) Private   d) All of the mentioned

```
7) using System;
interface I1
{    void A();
} interface I2 {    void A();
} class C : I1, I2
{                                    public
void A()
  {
    Console.WriteLine("C.A()");
  }
}
Class entry
{ static void main(){
C c = new C();
I1 i1 = (I1)c;
I2 i2 = (I2)c;
}
c.A();
I1.A();
I2.A();
}
```
What will be the output of the program.
A. C.A() C.A() A()

B. c.A(); i2.A();
    i1.A();

C.Error

D. None

8) using System;
interface I1
{ void A(); } interface I2 { void A(); }
class C : I1, I2 { public void A()   {
Console.WriteLine("C.A()");   }
void I1.A()
   { Console.WriteLine("I1.A()"); }
}
Class entry
{ static void main(){
 C c = new C();
c.A();   I2 i2 = c;
c.A();}}

a. C.A(),C.A()   b. C.A(),I1.A()   c.I1.A(),C.A()   d. None Q8

9) using System;
interface I1
{ void A();} interface I2
{ void A();}
        class
C : I1, I2
{ void I1.A()
   { Console.WriteLine("I1.A()"); }
}
Class entry
{ static void main(){
C c = new C(); c.A();
        }}

a. Compile time Error   b. I2.A ()   c. Run time Error   d. none

10) using System;
interface I1
{ void A();} interface I2 { void A();} class
C : I1, I2 {   void I2.A()
   { Console.WriteLine("I2.A()"); }
   Void A() { Console.WriteLine("I1.A()");}
}
Class entry
{ static void main(){
C c = new C(); I2 x=new C();
c.A();
x.A();}}

a. I1.A(),I2.A()   b. I2.A(),I1.A()   c. Error   d. None

11) using System;
   interface I1
   { void A();} interface I2 { void
   I1.A();}   class
   C : I1, I2
   {   void I2.A()
     { Console.WriteLine("I2.A()"); }   Void A() {
   Console.WriteLine("I1.A()");}
   }
   Class entry
   { static void main(){

   I1 x=new C(); I2 p=new c();   x.A();
   p.A();
   }}
   a. I1.A(),I2.A()   b.I1.A();   c. Error   d. None

   12) using System; class Test { static void
   Main() {
   A.   F();
   B.   F() }} class A { static A() {
     Console.WriteLine("Init A");
    }   public static void F() {   Console.WriteLine("A.F");
    }} class B { static B() {
    Console.WriteLine("Init B");
    }   public static void F() {   Console.WriteLine("B.F");
    }
   }

   What will be the output
   A.**Init A A.F Init**
   B
   B.F

   B.None

   C. Init B B.F
   Init A
   A.F

   D.Error

   13) Constant variable are by default static
   a. True   b. false

14) Readonly variable must be either initialised at time of declaration or in constructor
a. True   b. False

15) Readonly variable must be initialised at time of declaration
a. true   b. **false**

16) Readonly variable required data at compile time
a. True   **b. False**

17)Const variable required data at runtime
a. True   **b.** False

18) class program
{ const int a=5;
  Static void Main()
  { program C= new program();   Console.WriteLine(C.a);
   }
}
a. Compile t   b.5   c. none   d. run time error

19) class program { const int a=5;
  Static void main()
  { program C= new program();
 Console.WriteLine(program.a);
   }
}
a. Compile ti   **b.5**   c. none   d. run time error

20) You cannot declare static variable inside method
a. True   b. False

21) You cannot declare constan variable inside method
 a. true   **b. false**

Exception

1) Which among the following is NOT an exception?

a) Stack Overflow   b) Arithmetic Overflow or underflow

c) Incorrect Arithmetic Expression   d) All of the above mentioned

2) Select the statements which describe the correct usage of exception handling over conventional error handling approaches?

a)   As errors can be ignored but exceptions cannot be ignored

b)   Exception handling allows separation of program's logic from error handling logic making software more reliable and maintainable

c)   try – catch – finally structure allows guaranteed clean up in event of errors under all circumstances

d) All of the above mentioned

3) Select the correct statement about an Exception?

a) It occurs during loading of program   b) It occurs during Just-In-Time compilation

c) It occurs at run time   d) All of the above mentioned

4) Which of these keywords is not a part of exception handling?

a) Try   b) finally   **c) thrown**   d) catch

5) Which of these keywords must be used to monitor exceptions?

a) try   b) finally   c) throw   d) catch

6) Which of these keywords is used to manually throw an exception?

a) try   b) finally   **c) throw**   d) catch

7)   Choose the correct output for the given set of code:

```
1.  class program
2.  {
3.  static void main(string[] args)
4.  {
5.  int i = 5;
6.  int v = 40;
7.  int[] p = new int[4];
8.  try
9.  {
10. p[i] = v;
11. }
12. catch(IndexOutOfRangeException e)
13. {
14. Console.WriteLine("Index out of bounds");
15. }
16. Console.WriteLine("Remaining program");
17. }
18. }
```

a) Value 40 will be assigned to a[5];

b) **The output will be : Index out of bounds**

Remaining program

c) The output will be :

Remaining program

d)   None of the above mentioned

8) Choose the correct output for the given set of code:

```
1.  static void Main(string[] args)
2.  {
3.  try
4.  {
5.  Console.WriteLine("csharp" + " " + 1/Convert.ToInt32(0));
6.  }
7.  catch(ArithmeticException e)
8.  {
9.  Console.WriteLine("Java");
10. }
11. Console.ReadLine();
12. }
```

a) csharp   **b) java**   c) Run time error   d) csharp 0

9) Which of the following is the correct statement about exception handling in C#.NET?

a) Finally clause is compulsory

b) A program can contain multiple finally clauses

c)   **The statement in final clause will get executed no matter whether an exception occurs or not**

d) All of the above mentioned

10) Choose the correct output for given set of code:

```
1.  class Program
2.  {
3.  static void Main(string[] args)
4.  {
5.  try
6.  {
7.  Console.WriteLine("csharp" + " " + 1/0);
8.  }
9.  finally
10. {
11. Console.WriteLine("Java");
12. }
13. Console.ReadLine();
14. }
15. }
```

a) csharp 0

b) Run time Exception generation

c) Compile time error

d) Java

11) What will be the output of given code snippet?

```
1.  {
2.  try
3.  {
4.  int []a = {1, 2, 3, 4, 5};
5.  for (int i = 0; i < 7; ++i)
6.  Console.WriteLine(a[i]);
7.  }
8.  catch(IndexOutOfRangeException e)
9.  {
10. Console.WriteLine("0");
11. }
12. Console.ReadLine();
    }
```

a) 12345   **b) 123450**   c) 1234500   d) Compile time error

12. When no exception is thrown at runtime then who will catch it?
a) CLR   b) Operating System   c) Loader   d) Compiler

Basic C

1) _____ pops up a list of methods that can be called on that object,instead of typing the full method name.

a) Intelligence   b) intelligence   c) goodsense   d) **intellisense**

2) C# supports all the key object oriented concepts such as encapsulation inheritence and polimorphism
a. True   b. False

3) C# is case sensitive language.
a. True   b. False

4) We use the _____ function to write a string to the screen.
a. Console.Wrileln()   b. **Console.WriteLine()**   c. Console.Write()   d. Console.PrintLine()

5) _____ method can by called creating an instance of a class.
a. Non Static   b. Static   c. All of the above   d.None of the Above

6) C# provides us with two predefined references types _____ and _____.
a. int ,float   b. **Object, String**   c. bool , int

7) In an enum type each of the name constant should necessarily have an ___ type.

a. int   b. double   c. string

8) A reference to a reference-type instance requires how many bytes?
a. 2 bytes   **b. 4 bytes**   c.8 bytes   d.16 bytes

9) In C#, what character is used to indicate a verbatim string literal?
 a. @   b. !   c. "   d. #

10) What is boxing?
a. The conversion of a value type to an object instance
b. The conversion of an object instance to a value type.
c. The conversion of a value type to reference type.
d. The conversion of a reference type to a value type

11) What is the work of JIT compiler in .NET framework?
 a. It complies the assemblies.
 b. **It translates the code in the machine language**.
 c. It translates the MSIL code of assembly and uses the CPU architecture of the machine to execute a .NET application.
 d. It translates the assembly code of MSIL and uses the CPU architecture of the machine to execute a .NET application.

12) Benefit of .NET framework is/are_____.
a. Consistent programming Model   b. Language Interoperability
c. Automatic management of resources   **d. All of the above**

13) Which statement is used to replace multiple if statement in code?
a. Select – Case   b.**Switch – Case**   c.Both 1 and 2   d.None of the above

14) Which of the following is not a method of System. Object?
 a. GetType   b.ToString   c.Equals   d.Clone

15) What will be the o/p ?
 class Test
 {
  static void Main(string[] args)
  { int a;   a = 1;
 if(a)
     System.Console.WriteLine("I can use c# wrongly");   else
 System.Console.WriteLine("I can take chances");
 } }
a. I can use c# wrongly   b. I can take chances   c. Runtime Error   d. **Compile Time Error**

Deligate Lambda

1) To Handel exception in C# you must use
a. Try catch block   b. Only try   c. Try – finally   d. None

2) All Exceptions derived from
a. Exception class   b. Application exception   c. System Exception

3) A. An anonymous method cannot access ref or out parameters of the defining method.
   B. An anonymous method cannot have a local variable with the same name as a local
a. Only B is true   b. only A is true   c. none   d. **both statements are true**

4) delegate void CountIt(int end); class
AnonMethDemo3 {   static void Main() {
     int result;
CountIt count = delegate (int end) {
int sum = 0;
  for(int i=0; i <= end; i++) {   Console.WriteLine(i);
     sum += i;
                              }
return sum; // return a value from an anonymous method
          };
     result = count(3);
     Console.WriteLine("Summation of 3 is " + result);
     }
     }
a. 6   b. 0   c. Error   d. None

5) delegate int CountIt(int end);   class
AnonMethDemo3 {   static void Main() {   int
result;
     CountIt count = delegate (int end) {
       int sum = 0;
      for(int i=0; i <= end; i++) {
     Console.WriteLine(i);
            sum += i;
                       }
            return sum; // return a value from an anonymous method
        };
     result = count(3);
     Console.WriteLine(result);
     }
     }
a. 1,2,3 6   b. none   c. 1,2,3,

6) delegate int addition(int x, int y);   class myclass

```
        {
         public int add(int p, int q)
           {
            return p + q;
           }
          public int mul(int p, int q)
           {
            return p * q;
           }
         }
        class Program
        {
          static void Main(string[] args)
          {
            myclass m = new myclass();        addition a =delegate(int p,int q){int r; r=p+q;
    return r;};       a += delegate(int p, int q) { int r; r = p * q; return r; };
    Console.WriteLine(a.GetInvocationList().Length);
            int invo = a(3, 5);
            Console.WriteLine(invo);
             Console.ReadLine();
           }
         }
        }
```

a.2, 15   b.15,8   c. Error   d. none

7) delegate int Incr(int v);   class
SimpleLambdaDemo {   static
void Main() {
   Incr incr = count => count + 2;   int x = -5;   while(x <=
0) {   Console.Write(x + " ");   x = incr(x); //
increase x by 2
   }
}
}
    }

a. -5,-3,-1   **b.** None   C. 5,3,1,   D. Error

8) deligate for this lambda expression n => n % 2 ==

a.delegate true deli();   c. **deligate bool deli();**
c. deligate int deli();   d. none

9).Using system;
Delegat bool isEven(int x);
Class myclass
{ public static void Main()
```

```
{
    isEven isEven = n => n % 2 == 0;

    // Now, use the isEven lambda expression     Console.WriteLine("Use isEven lambda expression:
");
    for(int i=1; i <= 3; i++)      if(isEven(i))
Console.WriteLine(i + " is even."); } }
```

a. 2   b. none   c. 1,2,3   d. Error

10) Data written before => is known as
a. **input parameter**   b. output parameter   c. represent return value   d. None

Name Method

1) using System; class Program   {
static void Main(string[] args)
     { mycall("vita"); mycall("vita",55);
Console.ReadLine();   }
     static void mycall(string message, int age =25)
     {
     Console.WriteLine("{0}", message);
        Console.WriteLine("{0}", age);
     }
   }
a. Vita, 25 ,vita, 55   b.Vita,vita,55   c. Error   d.Vita,55,vita,25

2) using System;
   class Program
   {
     static void Main(string[] args)
     {
        DisplayFancyMessage(message: "vita", age: 25,addr: "juhu");

        Console.ReadLine();
     }
     static void DisplayFancyMessage(int age,string message, string addr)
     {

     Console.WriteLine(message);
     Console.WriteLine("{0} {1}",age,addr);

     }

   }
}
```

a. vita,25,juhu   b. error   C.juhu,vita,25   d. runtime error

3) using System;
```
   class Program
     {
      static void Main(string[] args)
      {
         DisplayFancyMessage(message= "vita",  age= 25,addr= "juhu");
Console.ReadLine();
      }

      static void DisplayFancyMessage(int age,string message, string addr)        {

      Console.WriteLine(message);
      Console.WriteLine("{0} {1}",age,addr);

      }
    }
}
```
a. vita,juhu,25   **b. Error**   c. juhu,vita,25   d. runtime error

4) IClonable interface has abstract method
a. Clone ===clone   b. memberwiseclone   c. both   d. None

5) class Program
```
   {
      static void Main(string[] args)
      {
        DisplayFancyMessage( "Wow! Very Fancy indeed!", 50, name:"raj");
       DisplayFancyMessage( "geeta",  message: "hello",50);
        Console.ReadLine();
      }
      static void DisplayFancyMessage( string message, int number, string name,)        {        Console.
WriteLine("{0},{1},{2}",number, name, message );
      }

   }
```
a. Error   b.50, geeta, hello   c.hello,geeta,50   d. none

6) foreach loop internally calling
a. Iclonable   **b. IEnumerable**   c. both   d. none

7) using System; class Program
```
   {
      static void Main(string[] args)
```

```
        {
            EnterLogData(message:"Error",string owner = "Programmer", DateTime timeStamp = DateTime.Now)

            Console.ReadLine();
        }
```

```
static void EnterLogData(string message,string owner = "Programmer", DateTime timeStamp =
DateTime.Now)
{
Console.Beep();
Console.WriteLine("{0}", message);
Console.WriteLine("{0}", owner);
Console.WriteLine("{0}", timeStamp);
}
```
a. Error   b. Error, Programmer, 02/06/2015   c. none   d. Programmer, Error, 02/06/2015

8) IComparable has abstract method
a. compareTo   b. compare
c. comparer   d. all the above

9) IComparer has abstract method
a. Clone   b. **compare**   c. comparer   d. none

10) Which statement is true
 a. when you implement interface and use abstract method you must use public access modifier.
 b. when you implement interface and use abstract method you may use public access modifier
a. **only A is true**   b. both are true   c. only b is true   d. none

11) Which statement is true
A. MemberwiseClone() method copy value type bit by bit and for reference type use shallow copy
B. MemberwiseClone() method copy value type and reference type as shallow copy
a. only b is true   b. **only a is true**   c. none   d. both

12) To short array you have
a. **static sort() method in Array class**   c. virtual sort() method in Array class
b. user have to write own algorithm   d. none

13) What will be the output using   System;
```
    delegate int addition();
  class myclass
{      int a, b;      public int add()
    {        return a + b;
    }
    public myclass(int a, int b) { a = a;b = b; }
```

```
    }
    class Program
    {
        static void Main(string[] args)
        {
            myclass m = new myclass(6,6);

            addition a=m.add;       int r = a();
            Console.WriteLine(r);
            Console.ReadLine();
        }
    }
}
```

       a. 0   b. 12   c. Error   d. None

14) using System; delegate int addition();

```
    class myclass
    {       int a, b;       public int
    add()
        {       return a + b;
        }
        public myclass(int a, int b) {this. a = a;this.b = b; }
    }
    class Program
    {
        static void Main(string[] args)
        {
            myclass m = new myclass(6,6);

            addition a=m.add;       int r = a();
            Console.WriteLine(r);
            Console.ReadLine();
        }
    }
}
```

       a. 12   b. None   c. Error   d. 0

15) delegate int addition(int x,int y);   class   myclass

```
    { public int add(int p,int q)
    {       return p + q;
    }
    public int mul(int p,int q)
    {
        return p * q;
    }
```

```
        }
    class Program
    {
        static void Main(string[] args)
        {
            myclass m = new myclass();

            addition a=m.add;        addition b = m.mul;
    addition tot = a + b;

                int r = tot(3,5);        Console.WriteLine(r);
            Console.ReadLine();
        }
    }
}
```

a. 15   b. Error   c. 8, 15   d. none

16) deligate is derived from
a.   System. Deligat
b.   **System . MulticastDelegate**
c.   none
d. from both

17) int invocationCount = d1.GetInvocationList().GetLength(0); the above code assume d1   is variable of a type deligate
a. This method give length of method bind with deligate
b. This method give list of method
c. None
d. **This method give list of parameter of method**

18) readonly key are internally static
a. True   b. **False**

19) readonly key can not be used in method
a. true   b. **False**

20) Which statement is true
A.as operator is like a cast,if conversion not possible it will return null instead of raising exception
B as operator is like a cast,if conversion not possible it will raise exception
a. only A   b. only B   c. both true   d. both false

21) Array.Sort() method use a.

a. Quicksort algorithm.   b. Heapsort algorithm

c. insertion sort algorithm.   d. **all three depend on size of dat**a

22) as operator perform only conversion

  a. reference conversion   b. nullable

  c. boxing conversion   d. all the above

Assembly Coll Basic

1) Name Type of assembly

a. **Private ,shared assembly**   b**.** Public ,protected assembly   c. All the above   d. None

2) In Shared Assembly every project will have local copy

  a. True   b. **False**

3) In Private Assembly every project will have local copy

  a. **True**   **b.** False

4) For shared Assembly you have to generate Strong name

a. **true**   b. False

5) Strong Name includes the

  a. only name of the .net assembly,   b. only version number,

  c. culture identity, and a public key token   d. **all the above**

6) Shared Assemblies are installed at:

a. System Assembly Cache   b. **Global Assembly Cache**

c. Machine Assembly Cache   d. Windows Assembly Cache

7) To create a key pair command is

a. sn –k   b. sn-k   c. ns -k   d. none

8) Command to move dll file in shared location

a. gacutil/i dllfilename   b. gc   c. gautyil/I   d. none

9) What are delegates?

 a. Value Pointer   b. **Function Pointer**   c. Pass By Reference   d. Pass By Value

10) Generics provide better performance because they do not result in boxing or unboxing penalties when storing value types.

  a. True   b. False

11) Generics are not type safe because they can contain different type you specify.

  a. True   b. **False**

12) To help overcome the limitations of a simple array, the .NET base class libraries ship with

a. Thread class   b. **Collection class**   c**.** None   d. Connection class

13) Collection classes are built to dynamically resize themselves on the fly as you insert or remove items

a. True   b**.** False

14) Array List is in namespace

a. System   b. **System.Collection**   c. System.Collection.Generic   d. none

15) When creating a C# Class Library project, what is the name of the supplementary file that Visual Studio.NET creates that contains General Information about the assembly?

a. AssemblyInfo.xml   b. **AssemblyInfo.cs**

c. AssemblyInformation.cs   d. AssemblyAttributes.cs

16) Which of the following is a value type, and not a reference type?

a. array   b. delegate   c. **enum**   d. class

17) What is the difference between Overridding and Overloading?

a. Overridding, same name with different return type and overloading same name with different argument

b. Overridding is dynamic, overloading is static

c. **Overridding, same signature with different definition, overloading has different signature** d. All the above Q18

18) A reference to a reference-type instance requires how many bytes?

a. 2 bytes   b. **4 bytes**   c.8 bytes   d. 16 bytes

19) Which of the following is the C# escape character for Null?

a. \n   b. **\0**   c.\f   d. \v

20) Which keyword is used in C# to prevent a class from being inherited by another class?

a. override   b. protected   **c. sealed**   d. NotInheritable

21) C# types are defined in _____, organized by _____, compiled into _____, and then grouped into _____.

     a. files, modules, namespaces, assemblies

     b. files, namespaces, assemblies, modules

     c. files, assemblies, namespaces, modules

     d. **files, namespaces, modules, assemblies**

22) What is Boxing?

     a. **The conversion of a value type to an object instance**

b. The conversion of an object instance to a value type.

c. The conversion of a value type to reference type.

d. The conversion of a reference type to a value type

23) Which of the following is true for a special member of the class namely 'this'

     a. this cannot be used in a static method

     b. this cannot be used in a class A to access a member of class B

     c. The this member can never be declared: it is automatically implied when you create a class **d. All the above are correct**

     e. None of above

ADO _NET

1) To use the .NET Framework Data Provider for SQL Server, an application must reference the _____ namespace.
a) System.Data.Client   **b) System.Data.SqlClient**
c) System.Data.Sql   d) None of the mentioned

2) _____object is used to fill a DataSet/DataTable with query results in ADO.net.
a) DataReader   b) Dataset   **c) DataAdapter**   d) DataTables

3) classes used to access a SQL Server database in the managed space.
Valid Code for Creating a SqlConnection Object would be :
a) SqlConnection conn = new SqlConnection(
"Data Source=(local);Initial Catalog=Northwind;Integrated Security=SSPI");

b)SqlConnect conn = new SqlConnection(
"Data Source=(local);Initial Catalog=Northwind;Integrated Security=SSPI");

c)SqlConnection conn = new SqlConnect(
"Data Source=(local);Initial Catalog=Northwind;Integrated Security=SSPI"); advertisements

d) All of the mentioned

4). Syntax for closing and opening the connection in ADO.net is : a) sqlConn.Open() and sqlConn.close()
b) sqlConn.open() and sqlConn.Close()
c) sqlConn.Open() and sqlConn.Close()
d) None of the mentioned

5) The DataSet object is a _____ storage.
a. connected   **b. Disconnected**   c. polling   d. None

6) _____ is a bridge between a DataSet and data source for retrieving and saving data.
1. DataControler   2. DataCommand   **3. DataAdapter**   4. None

7) How instantiate the DataReader ?
   a. **by calling a Command object's ExecuteReader.**
   b. by calling a Query object's ExecuteQuery.
   c. by calling a new().
   d. None

8) When we need to retrieve only a single value from the Database,which Method is efficient
a. ExecuteReader()   **b. ExecuteScalar()**   c. ExecuteNonQuery()   d. ExecuteXmlReader()

9) If we are not returning any records from the database which method is used

a. ExecuteReader ()   b. ExecuteScalar ()   c. ExecuteScalar ()   **d. ExecuteNonQuery()**

10) To populate the data set, which method of DataAdapter is used
a. GetData()   b. FillData()   c. FillDataset()   **d.Fill()**

11) What does ADO stand for?
a. Advanced Data Object   b. Active Data Objects
c. ActiveX Directory Objects   **d. ActiveX Data Objects**

ASP

1) What does ASP stand for?
a. All Standard Pages   **b. Active Server Pages**   c. A Server Page   d. Active Standard Pages

2) What attribute must be set on a validator control for the validation to work?
   a.Validate   b. ValidateControl   c. ControlToBind   **d. ControlToValidate**

3) What is the Web.config file used for ?
a. To store the global information and variable definitions for the application
b. To store the global information and variable definitions for the application
c. To configure the web server
d. To configure the web browser

4) What is the file extension used for ASP.NET files?
a. ASP   **b. ASPX**   c. Web   d. None of the above

5) The first event triggers in an aspx page is.
a. Page_Init()   b. Page_Load()   c. Page_click()

6) 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

7) We can manage states in asp.net application using
a. Session Objects   b. Application Objects   c. Viewstate   **d. All of the above**

8) Caching type supported by ASP.Net
a. Output Caching   b. DataCaching   **c. a and b**   d. none of the above

9) What is used to validate complex string patterns like an e-mail address?
a. Extended expressions   **b. Basic expressions**
c. Regular expressions   d. Irregular expressions

10) An alternative way of displaying text on web page using

a. **asp:label**   b. asp:listitem   c. asp:button

11) Default Session data is stored in ASP.Net.
a. StateServer   b. Session Object   c. **InProcess**   d. all of the above

12) How do you get information from a form that is submitted using the "post" method?
a. Request.QueryString   b. **Request.Form**   c. Response.write   d. Response.writeln

13) Which object can help you maintain data across users?
a. **Application object**   b. Session object   c. Response object   d. Server object

14) Which of the following ASP.NET object encapsulates the state of the client?
a. **Session object**   b. Application object   c. Response object   d. Server object

15) Which of the following control is used to validate that two fields are equal?
a. RegularExpressionValidator   b. **CompareValidator**
c. equals() method   d. RequiredFieldValidator

16) Which of the following transfer execution directly to another page?

a. **Server.Transfer**   b. Response.Redirect   c. Both A. and B.   d. None of the Above

17) The type of code found in Code-Behind class is _____?
a. **Server-side code**   b. Client-side code   c. Both A. and B.   d. None of the above

18) When an .aspx page is requested from the web server, the out put will be rendered to browser in following format.
a. HTML   b. XML   c. WML   d. JSP

19) Which of the following is true?
a. IsPostBack is a method of System.UI.Web.Page class
b. **IsPostBack is a method of System.Web.UI.Page class**
c. IsPostBack is a readonly property of System.Web.UI.Page class

20) Does the EnableViewState allows the page to save the users input on a form?
a. **Yes**   b. No

21) Explain the significance of Server .MapPath a.
Returns the Virtual Path of the web folder
b. Maps the specified virtual path to Physical path
c. **Returns the physical file path that corresponds to virtual specified path** d.
   All the above

22) By default, ASP.NET store SessionIDs in _____.
a. **Cookies**   b. Cache   c. Database   d. Global variable

ENTITY

1) Which of the following is True?

a. Entity Framework is an ORM framework.

b. **Entity Framework is an open source ORM framework.**

c. Entity Framework is database mapping tool.

d. Entity Framework is object mapping tool.

2) A pattern of loading related data where a query for one type of entity also loads related entities as part of the query is called:

a. Lazy loading   b. **Eager loading**   c. Explicit loading   d. Quick Loading

3) Which of the following development approaches are supported in Entity Framework?

a. Code First   b. Database First   c. Model First   d. **All of the above**

4) What window in Visual Studio display CSDL, MSL and SSDL of Entity Framework?

a. Model window   b. Model Browser   c. **EDM Designer**   d. Solution Explorer 5) Which of the following is TRUE?

a. DbContext can not be used in Code First approach

b. ObjectContext is a wrapper around DBContext

c. **DbContext is a wrapper around ObjectContext**

d. DbContext is a sealed class which cannot be override.

6) CSDL stands for

a. Common Schema Definition Language   b. **Conceptual Schema Definition Language**

c. Conceptual Store Definition Language   d. Conceptual Storage Definition Language

7) Which of the following query syntax can be used to query EDM?

a. LINQ-to-Entity   b. Entity SQL   c. Native SQL   d. **All of the above**

8) An XML-based language that describes the storage model of an Entity Framework application is called

a. SSDL   b. CSDL   c. EDM   d. **MSL**

9) An XML-based language that describes the mapping between the conceptual model and storage model of an Entity Framework Application is called

a. SSDL   b. **CSDL**   c. EDM   d. MSL

10) Which of the following is NOT a type of entity?

a. POCO   b. POCO Proxy   c. EntityObject   d. **D: DBSet**

11) Which of the following is NOT TRUE about the Entity Framework?

a. It automatically generates the classes from the model and updates these classes dynamically when the model is changed.

b. It takes care of database connectivity.

c. It provides query syntax for querying the model

d. **It does not provide any mechanism to track changes to the model's objects.**

12) Which of the following is responsible for change tracking management?

a. DBContextManager   b. ObjectContextManager

c. **ObjectStateManager**   d. EntityObjectManager

13) How to disable Lazy loading using DBContext?

a. myDBContext.Database.LazyLoadingEnabled = false;

b. **myDBContext.Configuration.LazyLoadingEnabled = false**;

c. myDBContext.LazyLoadingEnabled = false;

d. myDBContext.Students.LazyLoadingEnabled = false;

14) Which interface you have to implement to get the reference of ObjectContext from DBContext? **a. IObjectContextAdapter**   b. IDBContextAdapter

c. IEntityObjectContext   d. IObjectContext

15) An API that can be used to configure a Code First model is called:

a. Fluent API   b. CLR API   c. POCO API   d. T4 Template

MVC

1) MVC stands for _____.

a. Model, Vision & Control   **b.** Model, View & Controller

c. Model, ViewData & Controller   d. Model, Data & Controller

2) Which of following is TRUE?

a. The controller redirects incoming request to model.

b. **The controller executes an incoming request.**

c. The controller controls the data.

d. The controller render html to view.

3) The model is a _____.

a. Shape of data   **b.** Html content   c. Collection of data   d. Type of data.

4) Which of the following is a type of view in MVC?

a. Partial view   b. Executable view   c. Data view   d. Designer view

5) Which of the followings are Action Selectors?

a. ActionName   b. NonAction   c. ActionVerbs   d. **All of the above**

6) Which is the default http method for an action method?

a. HttpPost   b. **HttpGet**   c. HttpPut   d. HttpDelete

7) Which of the following view file types are supported in MVC?

a. cshtml   b. vbhtml   c. aspx   d. **All of the above**

8) HtmlHelper class _____.

a. Generates html elements   b. Generates html view

c. Generates html help file   d. Generates model data

9) _____ attributes can be used for data validation in MVC.

a. DataAnnotations   b. Fluent API   c. DataModel   d. HtmlHelper

10) Which of the following view contains common parts of UI?

a. Partial view   b. Html View   c. **Layout view**   d. Razor view

11) How to transfer data from controller to view?

a. Using model object   b. Using ViewBag   c. Using ViewData   d. **All of the above**

12) TempData is useful to _____.

a. Transfer data from view to controller

b. **Transfer data from one page to another page**

c. Transfer data from controller to controller

d. Store data permanently.

13) What is action filters?

a. Action filter executes before and after action method executes.

b. Action filter executes before action method executes.

c. Action filter executes after action method executes.

d. Action filter executes parallel to action method.

14) Bundling allows _____.

a. Loading of multiple images in single request   b. Loading of multiple view files in single request.

c. Loading of caching of multiple script files   d. **Loading of multiple script files in single request.**

15) Which of the following is a default route pattern in MVC?

a."/{action}/{controller}/{id}"   b."{controller}/{id}"

c."{controller}/{action}/{id}"   d."{controller}/{action}"

16) Which of the following default class is used to configure all the routes in MVC?

a. FilterConfig   b. RegisterRouteConfig   c. **RouteConfig**   d. MVCRoutes

17) Which of the following method of html helper generates html control based on the data type of specified property?

a. Html.TextBox   b. Html.Password   c. **Html.Editor**   **d.** Html.Display

18) Which is the best approach to assign a session in MVC?
A) System.Web.HttpContext.Current.Session["LoginID"] =7;
B) **Current.Session["LoginID"] =7;**
C) Session["LoginID"] =7;
D) None

19) RedirectToActionPermanent() Method for which Status code represents?
A) 304   B) 302   **C) 301**   D) 300   E) None

20) RedirectToAction() Method for which Status code represents?
A) 304   **B) 302**   C) 301   D) 300   E) None

21) What is ActionResult() ?
A) It is an abstract Class   B) It is a Concrete Class
C) Both A and B   D) None

22) What is ViewResult() ?
A) It is an abstract Class   **B) It is a Concrete Class**
C) Both A and B   D) None

23) return View() works like in ASP.Net MVC C# as
A) Server.Transfer()   B) Response.Redirect()
C) Both A and B   D) None

24) RedirectToAction() works like in ASP.Net MVC C# as
A) Server.Transfer()   **B) Response.Redirect()**
C) Both A and B   D) None

25) In which format data can be return from XML into table ?
A) DataSet   B) Datatable   C) A and B   D) None

26) Can we use view state in MVC ?
A) Yes   **B) No**   C) Both A & B   D) None

27) What Request Processing technique follows ASP.Net ?
A) Top-Down   B) Down-Up   **C) Pipeline**   D) Water fall

28) What is DRY principle in ASP.Net ?
A) Don't repeat yourself.   B) Don't revise yourself.
C) both a and b   D) None

29) What is default authentication in Internet Information Services (IIS)?

A) Standard User   B) Administrator   **C) Anonymous**   D) None

30) What is the extension of MVC view when using C#?

A) cshtml   B) vbhtml   C) None   D) Both A & B

31) What is the extension of MVC view when using vb.net?

A) cshtml   **B) vbhtml**   C) None   D) Both A & B

32) How can you comment using Razor Syntax?
A) *@ Comment me *@   **B) @* Comment me *@**
C) @* Comment me @*   D) *@ Comment me @*

33) Which Namespace is used for Razor View Engine ?
A) System.Web.Razor   B) System.Web.Mvc.WebFormViewEngine
C) Both A & B   D) None

34) Which Namespace is used for ASPX View Engine ?
A) System.Web.Razor   **B) System.Web.Mvc.WebFormViewEngine**
C) Both A & B   D) None

35) The Razor View Engine uses to render server side content.
A) @   B) <%= %>   C) Both A & B   D) None

36) The ASPX View Engine uses to render server side content.
A) @   **B) <%= %>**   C) Both A & B   D) None

37) Which is more faster between ASPX View Engine and Razor View Engine.
A) ASPX View Engine   B) Razor View Engine   C) Both A & B   D) None

38) Does Razor Engine supports for TDD ?
A) Yes   B) No   C) None

39) Does ASPX View Engine supports for TDD ?
A) Yes   **B) No**   C) None

40) How to Print value from Controller to View in MVC ?
A) ViewBag.ECMDetail = "my message"; and in view @ViewBag.ECMDetail
B) ViewBag.ECMDetail = "my message"; and in view ViewBag.ECMDetail
B) ViewBag.ECMDetail = "my message"; and in view ViewBag.Title
D) None

41) What are the advantages of using ASP.NET routing?
Answer: Clean URLs is originally brought from Ruby on Rails. http://www.technologycrowds.com?abc=10 ,
now clean URL in MVC ASP.Net will be work like http://www.technologycrowds.com/abc/10

42) What is the significance of ASP.NET routing?
Answer: Default Route Name:
"{controller}/{action}/{id}", // URL with parameters

By default routing is defined under Global.asax file. MVC ASP.Net uses routing to map between incoming browser request to controller action methods.

43) Can be it possible to share single view across multiple controllers in MVC?
Answer: We can put the view under shared folder, it will automatically view the across the multiple controllers.

44) Are MVC and Web API merged into one in MVC 6?
A) Yes   B) No   C) Both A & B   D) None

45) Does MVC 6 introduced new JSON project based structure?
A) Yes   B) No   C) Both A & B   D) None

46) Does MVC 6 allow only save change, hitting the save but then refreshing the browser to reflect changes?
A) Yes   B) No   C) Both A & B   D) None

47) Does vNext is now Open Sourced via the .NET Foundation and open to public contributions.
A) Yes   B) No   C) Both A & B   D) None

48) Can vNext runs on both Mac and Linux today (Mono Version)?
A) Yes   B) No   C) Both A & B   D) None

49) What is the difference between MVC (Model View Controller) and MVP (Model View Presenter)? Answer: MVC controller handles all the requests, MVP handles as the handler and also handles the all requests as well.

50) How does work Viewstart in MVC (ASP.Net)?
A) Viestart is used to layout of the application.
B) Viewstart is used like Masterpage in traditional forms (ASP.Net pages).
C) Viewstart render first in the views.
D) **A, B and C.**
E) None

51) Viewstart comes under which folder name ?
A) Views   B) Account   C) Shared   D) Home

52) Does Viewstart override all Views layout/template under "Views" folder in MVC ?
A) Yes   B) No   C) Both A & B   D) None

53) What is the name of default Viewstart Page in ASP.Net MVC ?
A) _ViewStart.cshtml   B) _Layout.cshtml   C) _Login.cshtml   D) None

54) Can we use third party View Engine using ASP.Net MVC Engine ?
Yes, below are the top five alternative ASP.Net MVC View Engines.
   1.   **Spark** (Castle MonoRail framework projects), Open Sourced, it is popular as MVCContrib library.

1. **NHaml** works like inline page templating.
1. **NDjango** uses F# Language.
1. **Hasic** uses VB.Net, XML.
1. **Bellevue** for ASP.NEt view, It respects HTML class first.

55) What is scaffolding using ASP.Net MVC Engine?
Answer: Scaffolding helps us to write CRUD operations blend using Entity Framework, It helps developer to write down simply even yet complex business logic.

56) What is life cycle in ASP.Net MVC Engine?
Step 1: **Fill Route** (Global.asax file will hit first).
Step 2: **Fetch Route**: It will gether information about controller and action to invoke.
Step 3: **Request** context
Step 4: **Controller instance:** it calls Controller class and method.
Step 5: **Executing Action:** It determines which action to be executed
Step 6: **Result (View):** Now Action method executed and returns back response to view in differentiating forms like Json, View Result, File Result etc.

57) Which is the way to render Partial View using ASP.Net MVC Razor Engine?
A) @Html.Partial("_PartialHeader") B) @Html.PartialView("_PartialHeader") C) @Html.PartialHtml("_PartialHeader")
D) B and C
E) None

58) Which Namespace is used to "Display" in Data Annotation using MVC ?
A) System.ComponentModel   B) System.ComponentModel.DataAnnotations
C) Both A and B   D) None

59) Which Namespaces are required to Data Annotation using MVC ?
A) System.ComponentModel   B) System.ComponentModel.DataAnnotations
C) Both A and B   D) None

60) Are both TempData/ViewData require typecasting in MVC?
A) Both (TempData/ViewData) requires type casting to avoid null exception.
B) No, these (TempData/ViewData) does not require type casting.
C) Both A) & B)
D) None

61) Is ViewBag slower than ViewData in MVC?
A) Yes   B) No   C) Both A) & B)   D) None

62) Is ViewData faster than ViewBag in MVC?
A) Yes   B) No   C) Both A) & B)   D) None

63) Are both TempData/ViewData property of Controller base class in MVC?
A) Yes   B) No   C) Both A) & B)   D) None

64) Does TempData used to pass data from one page to another page in MVC?

A) Yes   B) No   C) Both A) & B)   D) None

65) Can ASP.Net Web API specialize to XML or JSON ?

A) Yes   B) No   C) None

66) Does Web API (ASP.Net) supports to non SOAP based like XML or JSON ?

A) Yes   B) No   C) None

67) Does Web API (ASP.Net) supports to both version mobile apps and others ?

A) Yes   B) No   C) Both A & B   D) None

68) Can ASP.Net Web API, it works HTTP standard verbs like POST, GET, PUT, DELETE (CRUD Operations) ?

A) Yes   B) No   C) Both A & B   D) None

69) Can ASP.Net Web API ability to both self hosting (outside of IIS) and IIS ?

A) Yes   B) No   C) None

70) Can ASP.Net Web API has ability to transport non HTTP protocols like TCP, UDP, Named Pipes etc ?

A) Yes   **B) No**   C) None

71) What is AuthConfig.cs in ASP.Net MVC ?
A) AuthConfig.cs is used to configure route settings
B) **AuthConfig.cs is used to configure security settings including sites oAuth Login.** C)
   None
D) All

72) What is BundleConfig.cs in ASP.Net MVC ?
A) BundleConfig.cs in MVC is used to register filters for different purposes.
B) **BundleConfig.cs in MVC is used to register bundles used by the bundling and minification, serveral bundles are added by default like jQuery, jQueryUI, jQuery validation, Modernizr, default CSS references.** C) All
D) None

73) What is FilterConfig.cs in ASP.Net MVC ?
A) **FilterConfig.cs is used to register global MVC filters, HandleErrorAttribute is registered by default filter. We can also register other filters.**
B) FilterConfig.cs is used to register global MVC bundles.
C) None
D) All

74) What is RouteConfig.cs in ASP.Net MVC?
A) **RouteConfig.cs is used to register MVC config statements, route config.**
B) RouteConfig.css is used to register global MVC bundles.
C) None

D) All

75) What is the difference between HtmlTextbox and HtmlTextboxFor using ASP.Net MVC Razor Engine?
A) @Html.TextBox is not strongly typed, @Html.TextBoxFor is strongly typed that is why should be use @Html.TextBoxFor in MVC Razor Engine.
B) @Html.TextBox is strongly typed, @Html.TextBoxFor is not strongly typed that is why should be use @Html.TextBox in MVC Razor Engine.
C) None
D) Both A and B

76) What is the benefits of Html.RenderPartial using ASP.Net MVC Razor Engine? A) @Html.RenderPartial Returns response, moreover requires to create action.
B) @Html.RenderPartial Returns nothing (void), it is faster than @Html.Partial, moreover requires not to create action. C) None
D) Both A and B

77) What is the benefits of Html.Partial using ASP.Net MVC Razor Engine?
A) @Html.RenderPartial Returns response, moreover requires to create action.
B) **@Html.RenderPartial Returns string value, it is slower than @Html.RenderPartial, moreover requires not to create action.**
C) None
D) Both A and BSyntax@Html.Partial("_viewname");

78) How to check Request coming from which controller using MVC ASP.Net?
A) var _controller = HttpContext.Current.Request.RequestContext.Values["Controller"].ToString(); **B) var _controller = HttpContext.Current.Request.RequestContext.RouteData.Values["Controller"].ToString();** C) var _controller = RouteData.Values["Controller"].ToString();
D) None

79) For which ModelState.IsValid Validate ?
A) It checks for Entityframework Model state.
B) **It checks for valid Model State using DataAnnotations.**
C) It checks for SQL database state.
D) None

80) Which Name space is used to create chart using ASP.Net MVC?
A) using System.Web.MVC;   **B) using System.Web.Helpers;**
c) using System.Web.Chart;   D) All

81) How can we write Chart output to MVC View?
A) .Write(bmp);   B) Write("bmp");   **C) .Write("bmp");**   D) All

82) Which name space using can send email in ASP.Net MVC?
A) using System.Net.Mail;   B) using System.Net;
C) using System.Mail;   D) None

83) If Razor View Engine need to add JQuery function and contain @ special character then how we can write it in Razor View?

A) Replace @ to @@@ (tripple)   **B) Replace @ to @@ (double)**

C) None   D) Both (A & B)

84) How to set Default Value to Hidden Input Box using ASP.Net MVC?

A) @Html.HiddenFor(m => m.Name, "Jack")

B) **@Html.HiddenFor(m => m.Name, new { Value = "Jack"})**

C) @Html.Hidden(m => m.Name, new { Value = "Jack"})

D) None

85) How to check all errors of Model using ASP.Net MVC?

A) var errors = Model.Values.SelectMany(v => v.Errors);

B) var errors = ModelState.SelectMany(v => v.Errors);

C) **var errors = ModelState.Values.SelectMany(v => v.Errors);**

D) None

86) **AuthConfig.cs file is under in which App folder ?**

A) App_Data   **B) App_Start**

87) BundleConfig.cs file is under in which App folder ?   C) Content   D) Filters

 A) App_Data   **B) App_Start**

88) FilterConfig.cs file is under in which App folder ?   C) Content   D) Filters

 A) App_Data   **B) App_Start**

89. RouteConfig.cs file is under in which App folder ?   C) Content   D) Filters

 A) App_Data   **B) App_Start**   C) Content   D) Filters

90) WebApiConfig.cs file is under in which App folder ?

A) App_Data   **B) App_Start**   C) Content   D) Filters

91) Can you list the main types of result using ASP.Net MVC?

There are total 10 main types of result, **ActionResult** is main type and others are sub types of results as listed below:

- System.Web.Mvc.ActionResult
- System.Web.Mvc.ContentResult
- System.Web.Mvc.EmptyResult
- System.Web.Mvc.FileResult
- System.Web.Mvc.HttpStatusCodeResult
- System.Web.Mvc.JavaScriptResult
- System.Web.Mvc.JsonResult
- System.Web.Mvc.RedirectResult
- System.Web.Mvc.RedirectToRouteResult
- System.Web.Mvc.ViewResultBase

92) Which filter will be execute at first using ASP.Net MVC?

A) Action filters **B) Authorization filters** C) Response filters D) Exception filters

93) Which filter will be execute at last using ASP.Net MVC?
A) Action filters B) Authorization filters **C) Exception filters** D) Response filters

WCF

1. Which of the following is NOT true?
A) A WCF Service can be consumed by Windows applications
B) A WCF Service can be consumed by Web applications
C) A WCF Service can perform calculations
D) **A WCF Service cannot return a dataset**

2. WCF services can communicate with _____.
A) all programming languages
B) XML
C) only the languages included with Visual Studio .NET
D) **multiple platforms and multiple languages**

3. The standard method for storing data that can be transferred easily from one machine or platform to another is _____.
A) XML   B) SOAP   C) WSDL   D) WCF

4. One of the advantages of using _____ is that data are transmitted in a text format rather than a binary format.
A) XML   B) SOAP   C) WSDL   D) WCF

5.   Data that is in _____ format can pass through many firewalls that _____ cannot penetrate.
A) binary, text   **B) text, binary**   C) SOAP, WCF   D) WCF, SOAP

6. _____ is a popular standard that includes a set of rules for handling requests and responses including class names, method names, and parameters.
A) XML   B) WCF   C) WSDL   **D) SOAP**

7. The information about the names of the methods, the parameters that can be passed, and the values that are returned from the functions is controlled in some Web services by a description specified in _____.
A) XML   **B) SOAP**   C) WSDL   D) WCF

8. Always end your URI (or URL) with a _____ to avoid an extra trip to the server to determine that it is a site rather than a directory.
A) hyphen   **B) slash**   C) backslash   D) double slash

9. A resource on the Web is uniquely identified by its URI, which means _____.

A) Uniform Resource Identifier   B) Universal Registered Identifier C)
Uniform Registered Identifier   D) Universal Resource Identifier

10. To add a WCF Service, select the solution name in the Solution Explorer and select _____ from File menu.
A) Add / New Solution   **B) Add / New Web Site**
C) Add / New Service   D) Add / New Library

11. You have created a new service based on Windows Communication Foundation and also a client application to test the service. You want add an endpoint in the web.config file of the client application to use the new service. Which values should you include in you service element of the web.config file? A. Address   B. Contract   C. Binding   **D. All of these**

12. A service contract specifies what an endpoint communicates to the outside world. At a more concrete level, it is a statement about a set of specific messages organized into basic message exchange patterns (MEPs), such as request/reply, one-way, and duplex. Which of the following is NOT part of the Service Contract specification:
A. The data types of messages   B. The specific protocols and serialization formats C. The location of the operations   **D. The frequency of messages per second**

13. Services are groups of operations. To create a service contract you usually model operations and specify their grouping. In Windows Communication Foundation (WCF) applications, developers define the operations by creating a method and marking it with the which attribute? A. ServiceContractAttribute
              B. DataMemberAttribute
C. DataContractAttribute   **D. OperationContractAttribute**

14. You've created a new class in your .NET project that contains a wide variety of operations grouped together to form part of a Server Contract. You now need to add an attribute to the class to define it as a service contract. Which attribute should you use?
A. OperationContractAttribute   B. DataMemberAttribute
C. DataContractAttribute   **D. ServiceContractAttribute**

15. Both classes and interfaces represent a grouping of functionality and, therefore, both can be used to define a WCF service contract. However, it is recommended that you use interfaces because they directly model service contracts. Without an implementation, interfaces do no more than define a grouping of methods with certain signatures. Which of the following is a benefit of using interfaces to define Service Contracts?
A. Service contract interfaces can extend any number of other service contract interfaces.
B. You can modify the implementation of a service contract by changing the interface implementation, while the service contract remains the same
C. A single class can implement any number of service contracts by implementing those service contract interfaces.
D. **All of these**

16. You have created a new class which will be the basis for a Service Contract. You have used

ServiceContractAttribute and OperationContractAttribute to decorate the class and the methods. Which of the following is NOT an advantage of using classes instead of interfaces for Service Contracts?

A. Speed
B. All of these are disadvantages
C. Simplicity
D. Multiple Inheritance

17. Which of the following is TRUE regarding service operations and references to objects?

A. Objects must be serializable
B. You can't return values from service operations
C. Objects are passed as references
D. You can't pass parameters to service operations

18. You've created a new class and decorated it with the DataContractAttribute so that it forms a Data Contract for WCF. This class contains several attributes that you want to make available as part of the Data Contract. Currently these attributes are declared as private. What do you need to do to ensure these attributes are serializable?

A. Add the DataMemberAttribute and change the type to public
B. Add the DataContractAttribute to the attribute
C. Change the type to internal
D. **Add the DataMemberAttribute or change the type to public**

19. A developer has designed a service that contains a method called TakeAction which is decorated with the following attribute:
[OperationContractAttribute(IsOneWay=true)]
Another client application will invoke the TakeAction operation and continue processing after WCF writes the message to the network. What must the developer of the TakeAction method do to ensure the client action can call this method?

A. Use object as the return type
B. Use FaultException as the return type C.
Remove all parameters from the method signature
D. Use void as the return type

20. The signature of a service operation dictates a certain underlying message exchange pattern (MEP) that can support the data transfer and the features an operation requires. You want to adopt a pattern that supports the sending and receiving of messages by both the service and client. Which patter should you choose?

A. one-way
B. none of these
C. request/reply
D. duplex

21. Study the following line of code:
OperationContext.Current.GetCallbackChannel();
The ICalendarDuplexCallback interface is defined as the CallbackContract property in the Service Contract. In which class should you use this line of code?

A. Client
B. You should never use this
C. Both
D. Service

22. A client application interacts with a new Service that calculates interest rates for the banks customers. The Service Contract contains BasicHttpBinding as the binding type in the endpoint configuration. The service contains some methods that return sensitive information such as customers names and addresses. You want to ensure that these methods are encrypted. What should you do?

A. Set the ProtectionLevel to None in the ServiceContractAttribute
B. **Set the ProtectionLevel in the OperationContractAttribute to EncryptAndSign for each of the sensitive methods**

C. Nothing, all messages will be encrypted and signed already

D. Set the ProtectionLevel to Sign in the ServiceContractAttribute

23. Which of the following is FALSE regarding the WSHttpBinding class?

A. Provides WS-Addressing

B. Provides un-encrypted messages by default

C. Provides reliable messaging

D. Provides transactions

24. In Windows Communication Foundation (WCF) applications, which of the following is FALSE regarding Sessions?

A. Messages delivered during a session are processed in the order in which they are received

B. **They are explicitly initiated and terminated by the receiving application**

C. There is no general data store associated with a WCF session

D. D. Sessions correlate a group of messages into a conversation

25. The instancing behaviour (set by using the System.ServiceModel.ServiceBehaviorAttribute.InstanceContextMode property) controls how the InstanceContext is created in response to incoming messages. You have created a new WCF service and set the InstanceContextMode to PerCall. What is the behaviour of the InstanceContext in this mode?

A. A new InstanceContext is created for each call

B. A new InstanceContext is created for each channel

C. A new InstanceContext is created for all calls

D. A new InstanceContext is never created

26. When configuring a WCF service using Visual Studio, you can use either a Web.config file or an App.config file to specify the settings. The choice of the configuration file name is determined by the hosting environment you choose for the service. Where does the endpoint configuration element lie in a .NET configuration file?

A. System.ServiceModel – bindings – endpoint

B. **System.ServiceModel – services – service – endpoint**

C. System.ServiceModel – endpoint

D. System.ServiceModel – behaviors – behavior – endpoint

27. The System.ServiceModel.Channels namespace contains the DeliveryFailure enumeration. DeliveryFailure specifies the possible types of delivery failure for a message read from the queue. Which of the following elements is a valid DeliveryFailure?

A. BadSignature   B. AccessDenied   C. ReceiveTimeout   **D. All of these**

28. Which class in WCF represents the unit of communication between endpoints in a distributed environment?

A. RequestContext   **B. Message**   C. Binding   D. ChannelBase

28. Windows Communication Formats (WCF) is Microsoft's technology for communicating between applications on the same computer system, on a network, or across the

A. True   **B. False**

29. It is possible for a single application to be both a client and a service.

A. True   B. False

30. WCF cannot communicate with other platforms that support SOAP and simple XML.
A. True   **B. False**

31. An endpoint indicates where messages can be sent (address).
A. True   B. False

32. Data that is in binary format can pass through any firewall.
A. True   **B. False**

33. WSDL contains information about the names of the methods, the parameters that can be passed, and the values that are returned from the functions.
A. True   B. False

34. For technical specifications, the industry standard term URL is preferred to URI.
A. True   **B. False**

35. The transport protocol used by SOAP is HTTP.
A. True   B. False

36. To rename a Web Service you need to change only the name in the Solution Explorer.
A. True   **B. False**

37. When a new project is added to a WCF Service solution, the projects are saved independently.
A. True   B. False

Web API

1. Web API, an object that handles HTTP requests is known as a
   a) Model   **b) Controller**   c) Properties   d) Web server

2. Web API supports which of the following protocol?
   a) TCP   **b) HTTP**   c) Soap   d)   All of the above

3. Q.12) Web API supports which of the following request/response data formats by default?
   a) JSON   b) XML   c) BSON   **d) All of the above**

4. Which of the following .NET framework supports Web API?
   a) .NET 2.0   b) .NET 3.0   c) .NET 3.5   **d) .NET 4.0**

5. Which of the following statement is TRUE?
   a) Web API can be configured using web.config.
   b) Web API can only be configured by code.
   c) Web API can be configured using app.config.

d) None of the above

6. Web API uses which of the following open-source library for JSON serialization?
   a) Json.NET   b) JsonFormatter.NET   c) GetJson.NET   d) None of the above

7. Web API controller must be derived from _____.
   a) Controller class   **b) ApiController class**
   c) WebApiController class   d) WebController class

8. Which of the following types of routing is supported in Web API 2?
   a) Attribute Routing   b) Convention-based Routing
   c) All of the above   d) None of these

9. Which of the following types are valid response types of Web API 2 action method?
   a) HttpResponseMessage   b) IHttpActionResult
   c) Custom types   **d) All of the above**

10. Web API sends which of the following status code on successful execution?
    a) 200   b) 201   c) 500   d) 404

11. Which of the following is a formatter class for JSON?
    a) JsonMediaTypeFormatter   b) JsonMediaFormatter
    c) Json.Net   c) None of the above

12. Which of the following property returns all the formatters in Web API?
    a. GlobalConfiguration.Configuration.JsonFormatter
    b. Configuration.Formatters
    c. GlobalConfiguration.Formatters
    d. GlobalConfiguration.Configuration.Formatters

13. Web API Filters are used _____.
    a. to add an extra logic before or after action method executes
    b. to provide authentication and authorization.
    c. to Launch Web API
    d. to host Web API

14. Web API extract the values of primitive type parameters of an action method from _____ by default.
    a) HTTP Request Body   b) HTTP Header
    c) Message Header   **d) Query String**

15. Web API extract the values of complex type parameters of an action method from _____ by default.
    a) HTTP Request Body   b) HTTP Header
    c) Message Header   d) Query String

16. By default, Web API sends HTTP response with which of the following status code for all uncaught exception?
    a) 404 - Not Found   b) **500 - Internal Server Error**

c) 204 - No content.   d) None of the above

17. Which of the following is used to check the validity of the model in Web API?
    a) Mode.Valid   b) Model.IsValid
    c) **ModelState.IsValid**   d) ModelState.Valid

18. Web API 2 is supported in _____.
    a) **.NET 4.5**   b) .NET 4.0   c) .NET 3.5   d) .NET 3.0

19. Which of the following is true?
    a. Web API can be self-host.
    b. Web API can be host in IIS.
    c. Web API can be host in any web server that supports .NET Framework.
    d. All of the above