1. Which of the following statements are TRUE about the .NET CLR?

1. It provides a language-neutral development & execution environment.
2. It ensures that an application would not be able to access memory that it is not authorized to access.
3. It provides services to run "managed" applications.
4. The resources are garbage collected.
5. It provides services to run "unmanaged" applications.
6. Only 1 and 2
7. Only 1, 2 and 4
8. 1, 2, 3, 4
9. Only 4 and 5
10. Only 3 and 4

2. Which of the following statements is correct about Managed Code?

1. Managed code is the code that is compiled by the JIT compilers.
2. Managed code is the code where resources are Garbage Collected.
3. Managed code is the code that runs on top of Windows.
4. Managed code is the code that is written to target the services of the CLR.
5. Managed code is the code that can run on top of Linux.

3. Which of the following are NOT true about .NET Framework?

1. It provides a consistent object-oriented programming environment whether object code is stored and executed locally, executed locally but Internet-distributed, or executed remotely.
2. It provides a code-execution environment that minimizes software deployment and versioning conflicts.
3. It provides a code-execution environment that promotes safe execution of code, including code created by an unknown or semi-trusted third party.
4. It provides different programming models for Windows-based applications and Web-based applications.
5. It provides an event driven programming model for building Windows Device Drivers.
6. 1, 2
7. 2, 4
8. 4, 5
9. 1, 2, 4

4. Which of the following components of the .NET framework provide an extensible set of classes that can be used by any .NET compliant programming language?

1. .NET class libraries
2. Common Language Runtime
3. Common Language Infrastructure
4. Component Object Model
5. Common Type System

5. Which of the following jobs are NOT performed by Garbage Collector?

1. Freeing memory on the stack.
2. Avoiding memory leaks.
3. Freeing memory occupied by unreferenced objects.
4. Closing unclosed database collections.
5. Closing unclosed files.
6. 1, 2, 3
7. 3, 5
8. 1, 4, 5
9. 3, 4

6. Which of the following .NET components can be used to remove unused references from the managed heap?

1. Common Language Infrastructure
2. CLR
3. Garbage Collector
4. Class Loader
5. CTS

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

1. It is an environment for developing, building, deploying and executing Desktop Applications, Web Applications and Web Services.
2. It is an environment for developing, building, deploying and executing only Web Applications.
3. It is an environment for developing, building, deploying and executing Distributed Applications.
4. It is an environment for developing, building, deploying and executing Web Services.
5. It is an environment for development and execution of Windows applications.

8. Which of the following assemblies can be stored in Global Assembly Cache?

1. Private Assemblies
2. Friend Assemblies
3. Shared Assemblies
4. Public Assemblies
5. Protected Assemblies

9. Code that targets the Common Language Runtime is known as

1. Unmanaged
2. Distributed
3. Legacy
4. Managed Code
5. Native Code

10. Which of the following is the root of the .NET type hierarchy?

1. System.Object
2. System.Type
3. System.Base
4. System.Parent
5. System.Root

11. Which of the following is NOT an Arithmetic operator in C#.NET?

1. \*\*
2. +
3. /
4. %
5. \*

12. Which of the following is NOT an Assignment operator in C#.NET?

1. \=
2. /=
3. \*=
4. +=
5. %=

13. Which of the following statements is correct?

1. A constructor can be used to set default values and limit instantiation.
2. C# provides a copy constructor.
3. Destructors are used with classes as well as structures.
4. A class can have more than one destructor.

14. Which of the following statements are correct about static functions?

1. Static functions can access only static data.
2. Static functions cannot call instance functions.
3. It is necessary to initialize static data.
4. Instance functions can call static functions and access static data.
5. This reference is passed to static functions.
6. 1, 2, 4
7. 2, 3, 5
8. 3, 4
9. 4, 5
10. None of these

15. Which of the following statements is correct about constructors?

1. If we provide a one-argument constructor then the compiler still provides a zero-argument constructor.
2. Static constructors can use optional arguments.
3. Overloaded constructors cannot use optional arguments.
4. If we do not provide a constructor, then the compiler provides a zero-argument constructor.

16. In which of the following should the methods of a class differ if they are to be treated as overloaded methods?

1. Type of arguments
2. Return type of methods
3. Number of arguments
4. Names of methods
5. Order of arguments
6. 2, 4
7. 3, 5
8. 1, 3, 5
9. 3, 4, 5

17. Can static procedures access instance data?

1. Yes
2. No

18 How many times can a constructor be called during lifetime of the object?

1. As many times as we call it.
2. Only once.
3. Depends upon a Project Setting made in Visual Studio.NET.
4. Any number of times before the object gets garbage collected.
5. Any number of times before the object is deleted.

19. The string built using the String class is immutable (unchangeable), whereas, the ones built- using the String Builder class are mutable.

1. True
2. False

20. Which of the following will be the correct output for the C#.NET code snippet given below?

String s1 = "Nashik";

String s2;

s2 = s1.Insert(6, "Mumbai");

Console.WriteLine(s2);

1. NashiMumbair
2. Nashik Mumbai
3. Mumbai
4. Nashik
5. NashikMumbai

21. A property can be declared inside a class, struct, Interface.

1. True
2. False

22. Which of the following statements is correct about properties used in C#.NET?

1. A property can simultaneously be read only or write only.
2. A property can be either read only or write only.
3. A write only property will have only get accessor.
4. A write only property will always return a value.

23. A property can be declared inside a namespace or a procedure.

1. True
2. False

24. Which of the following statements is correct about properties used in C#.NET?

1. Every property must have a set accessor and a get accessor.
2. Properties cannot be overloaded.
3. Properties of a class are actually methods that work like data members.
4. A property has to be either read only or a write only.

25. Which of the following does an indexer allow to index in the same way as an array?

1. A class
2. A property
3. A struct
4. A function
5. An interface
6. 1, 3, 5
7. 2, 4
8. 3, 5
9. 3, 4, 5

26. Which of the following statements is incorrect about delegate?

1. Delegates are reference types.
2. Delegates are object oriented.
3. Delegates are type-safe.
4. Delegates serve the same purpose as function pointers in C and pointers to member function operators in C++.
5. Only one method can be called using a delegate.

27. In which of the following areas are delegates commonly used?

1. Remoting
2. Serialization
3. File Input/Output
4. Multithreading
5. Event handling
6. 1 and 2 only
7. 1 and 5 only
8. 1, 2 and 3 only
9. 4 and 5 only
10. All of the above

28. A derived class can stop virtual inheritance by declaring an override as

1. inherits
2. extends
3. inheritable
4. not inheritable
5. sealed

29. Which of the following are reuse mechanisms available in C#.NET?

1. Inheritance
2. Encapsulation
3. Templates
4. Containership
5. Polymorphism
6. 1, 4
7. 1, 3
8. 2, 4
9. 3, 5

30. If a namespace is present in a library then which of the following is the correct way to use the elements of the namespace?

A. Add Reference of the namespace.

Use the elements of the namespace.

B. Add Reference of the namespace.

Import the namespace.

Use the elements of the namespace.

C. Import the namespace.

Use the elements of the namespace.

D. Copy the library in the same directory as the project that is trying to use it.

Use the elements of the namespace.

E. Install the namespace in Global Assembly Cache.

Use the elements of the namespace.

31. Which of the following statements is correct about a namespace in C#.NET?

* 1. Namespaces help us to control the visibility of the elements present in it.
  2. A namespace can contain a class but not another namespace.
  3. If not mentioned, then the name 'root' gets assigned to the namespace.
  4. It is necessary to use the using statement to be able to use an element of a namespace.
  5. We need to organise the classes declared in Framework Class Library into different namespaces.

32. Which of the following can be declared in an interface?

1. Properties
2. Methods
3. Enumerations
4. Events
5. Structures

A. 1, 3

B. 1, 2, 4

C. 3, 5

D. 4, 5

33. Is it possible to create a custom attribute that can be applied only to specific programming element(s) like \_\_\_\_ .

A. Classes

B. Methods

C. Classes and Methods

D. Classes, Methods and Member-Variables

34. Which of the following CANNOT be a target for a custom attribute?

A. Enum

B. Event

C. Delegate

D. Interface

E. Namespace

35. Which of the following can be used to terminate a while loop and transfer control outside the loop?

1. exit while
2. continue
3. exit statement
4. break
5. goto

A. 1, 3

B. 2, 4

C. 3, 5

D. 4, 5

E. None of these

36. Which of the following is the correct output of the C#.NET code snippet given below?

int[ , , ] a = new int[ 3, 2, 3 ];

Console.WriteLine(a.Length);

A. 20

B. 4

C. 18

D. 10

E. 5

37. Which of the following is NOT a .NET Exception class?

A. Exception

B. StackMemoryException

C. DivideByZeroException

D. OutOfMemoryException

E. InvalidOperationException

38. Which of the following is the Object Oriented way of handling run-time errors?

A. OnError

B. HERESULT

C. Exceptions

D. Error codes

E. Setjump and Longjump

39. In a HashTable Key cannot be null, but Value can be.

A. True

B. False

40. Which of the following statements is valid about advantages of generics?

A. Generics shift the burden of type safety to the programmer rather than compiler.

B. Generics require use of explicit type casting.

C. Generics provide type safety without the overhead of multiple implementations.

D. Generics eliminate the possibility of run-time errors.

E. None of the above.

41. ADO.NET provides the ability to create and process in-memory databases called:

A. views.

B. relations

C. tables

D. datasets

42. \_\_\_\_\_\_\_\_\_\_\_\_\_is a property common in every validation control.

1. Validation Expression
2. Initial Value
3. Value To Compare
4. Control To Compare
5. Control To Validate

43. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the DataType return in IsPostback property.

1. bit
2. boolean
3. int
4. object
5. string

44. By default, a .Net web site is configured with which of the following authentication types?

1. Anonymous
2. Basic
3. Digest
4. Integrated Windows authentication

45. How can we force all the validation control to run?

1. Set EnableClientScript true
2. Page.IsValid()
3. Page.Validate

46. Tools to generate WCF Service Proxy

1. VisualStudio
2. SvcUtil.exe
3. Both a and b
4. None

47. WCF service endpoint made up following elements

1. Address, Communication and Binding
2. Address, protocol and communication
3. Address, binding and communication
4. None of the above

48. Maximum number of endpoint exposed by WCF service

1. 1
2. 3
3. No limit
4. None of the above

49. WCF supports Operation overloading by setting following operation contract attribute

1. Action
2. Name
3. Overload
4. None of the above

50. Which namespace is used to access WCF Service

1. System.Web
2. System.Service
3. System.ServiceModel
4. None