

- c. III, V
- d. IV, V
17. Which of the following is the correct output for the C#.NET code snippet given below?
Console.WriteLine(13/2 + "" + 13%2);
- a. 6.51
- b. 6.50
- c. 60
- d. 61
18. Which of the following is NOT an Assignment operator in C#.NET?
- a. \=
- b. /=
- c. *=
- d. +=
19. Which of the following statements are correct about functions and subroutines used in C#.NET?
- I. A function cannot be called from a subroutine.
- II. The ref keyword causes arguments to be passed by reference.
- III. While using ref keyword any changes made to the parameter in the method will be reflected in that variable when control passes back to the calling method.
- IV. A subroutine cannot be called from a function.
- V. Functions and subroutines can be called recursively.
- a. I, II, IV
- b. II, III, V
- c. III, V
- d. IV, V
20. How many values is a method capable of returning?
- a. 1
- b. 0
- c. Depends upon how many params arguments it uses.
- d. Any number of values.
21. Which of the following is the correct way to create an object of the class Sample?
- I. Sample s = new Sample();
- II. Sample s;
- III. Sample s; s = new Sample();
- IV. s = new Sample();
- a. I, III
- b. II, IV
- c. I, II, III
- d. I, IV
22. Which of the following statements are correct about the C#.NET code snippet given below?
sample c;
c = new sample();
- I. It will create an object called sample.
- II. It will create a nameless object of the type sample.
- III. It will create an object of the type sample on the stack.

- a. A constructor cannot be declared as private.
- b. A constructor cannot be overloaded.
- c. A constructor can be a static constructor.
- d. A constructor cannot access static data.
30. In an inheritance chain which of the following members of base class are accessible to the derived class members?
- I. Static
- II. Protected
- III. Private
- IV. Shared
- V. Public
- a. I, III
- b. II, V
- c. III, IV
- d. IV, V
31. Assume class B is inherited from class A. Which of the following statements is correct about construction of an object of class B?
- a. While creating the object firstly the constructor of class B will be called followed by constructor of class A.
- b. While creating the object firstly the constructor of class A will be called followed by constructor of class B.
- c. The constructor of only class B will be called.
- d. The constructor of only class A will be called.
32. Which one of the following statements is correct?
- a. Array elements can be of integer type only.
- b. The rank of an Array is the total number of elements it can contain.
- c. The length of an Array is the number of dimensions in the Array.
- d. The default value of numeric array elements is zero.
33. Which of the following is the correct output of the C#.NET code snippet given below?
- ```
int[, ,]a = newint[3, 2, 3];
Console.WriteLine(a.Length);
```
- a. 20
- b. 4
- c. 18
- d. 10
34. Which of the following statements are correct about the C#.NET code snippet given below?
- ```
int[][]intMyArr = newint[2][];
intMyArr[0] = newint[4]{6, 1, 4, 3};
intMyArr[1] = newint[3]{9, 2, 7};
```
- a. *intMyArr* is a reference to a 2-D jagged array.


```
int c;  
c = s1.CompareTo(s2);  
Console.WriteLine(c);
```

- a. 0
- b. 1
- c. 2
- d. -1

41. Which of the following statements are correct about the String Class in C#.NET?

- I. Two strings can be concatenated by using an expression of the form $s3 = s1 + s2$;
 - II. String is a primitive in C#.NET.
 - III. A string built using StringBuilder Class is Mutable.
 - IV. A string built using String Class is Immutable.
 - V. Two strings can be concatenated by using an expression of the form $s3 = s1 \& s2$;
- a. I, II, V
 - b. II, IV
 - c. I, III, IV
 - d. III, V

42. Which of the following statements are correct?

- I. A struct can contain properties.
 - II. A struct can contain constructors.
 - III. A struct can contain protected data members.
 - IV. A struct cannot contain methods.
 - V. A struct cannot contain constants.
- a. 1, 2
 - b. 3, 4
 - c. 1, 2, 4
 - d. 3, 5

43. When would a structure variable get destroyed?

- a. When no reference refers to it, it will get garbage collected.
- b. Depends upon whether it is created using new or without using new.
- c. When it goes out of scope.
- d. Depends upon the Project Settings made in Visual Studio.NET.

44. Which of the following statements is correct about the C#.NET code snippet given below?

```
struct Book  
{  
    private String name;  
    private int noofpages;  
    private Single price;  
}  
Book b = new Book();
```

- a. The structure variable b will be created on the heap.

- b. We can add a zero-argument constructor to the above structure
 - c. When the program terminates, variable b will get garbage collected.
 - d. The structure variable b will be created on the stack.
45. Which of the following statements is correct?
- a. A struct never declares a default constructor.
 - b. All value types in C# inherently derive from ValueType, which inherits from Object.
 - c. When the program terminates, variable b will get garbage collected.
 - d. The structure variable b will be created on the stack.
46. Which of the following statements are correct about Structures used in C#.NET?
- I. A Structure can be declared within a procedure.
 - II. Structs can implement an interface but they cannot inherit from another struct.
 - III. Struct members cannot be declared as protected.
 - IV. A Structure can be empty.
 - V. It is an error to initialize an instance field in a struct.
- a. I, II, III
 - b. II, III, V
 - c. II, IV
 - d. I, III
47. Which of the following statements is true about an enum used in C#.NET?
- a. An implicit cast is needed to convert from enum type to an integral type.
 - b. An enum variable cannot have a public access modifier.
 - c. An enum variable cannot have a private access modifier.
 - d. An enum variable can be defined inside a class or a namespace.
48. Which of the following statements are correct about an enum used in C#.NET?
- I. To use the keyword *enum*, we should either use [*enum*] or *System.Enum*.
 - II. Enum is a keyword.
 - III. Enum is class declared in System.Type namespace.
 - IV. Enum is a class declared in the current project's root namespace.
 - V. Enum is a class declared in System namespace.
- a. I, III
 - b. II, IV
 - c. II, V
 - d. III, IV
49. Which of the following is the correct output for the C#.NET code snippet given below?
- ```
enum color: int
{
 red,
 green,
 blue = 5,

```

```

 cyan,
 magenta = 10,
 yellow
}
Console.Write((int) color.green + ",");
Console.Write((int) color.yellow);

```

- a. 2, 11
- b. 1, 11
- c. 2, 6
- d. None of the above

50. Which of the following CANNOT be used as an underlying datatype for an *enum* in C#.NET?

- a. byte
- b. short
- c. float
- d. int

51. Which of the following statements are correct about enum used in C#.NET?

- I. Every enum is derived from an Object class.
  - II. Every enum is a value type.
  - III. There does not exist a way to print an element of an enum as a string.
  - IV. Every enum is a reference type.
  - V. The default underlying datatype of an enum is int.
- a. I, II, V
  - b. I, IV
  - c. III, V
  - d. II, III, IV

52. Which of the following statements is correct about an enum used in C#.NET?

- a. enum is a reference type.
- b. enum is a value type.
- c. Whether it a value type or a reference type depends upon size.
- d. Whether it a value type or a reference type depends upon a Project Setting made in Visual Studio.NET.

53. 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.

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

- a. Namespaces help us to control the visibility of the elements present in it.
  - b. A namespace can contain a class but not another namespace.
  - c. If not mentioned, then the name 'root' gets assigned to the namespace.
  - d. It is necessary to use the using statement to be able to use an element of a namespace.
55. A derived class can stop virtual inheritance by declaring an override as
- a. inherits
  - b. inheritable
  - c. extends
  - d. sealed
56. Which of the following statements is correct?
- a. When used as a modifier, the new keyword explicitly hides a member inherited from a base class.
  - b. Operator overloading works in different ways for structures and classes
  - c. It is not necessary that all operator overloads are static methods of the class.
  - d. The cast operator can be overloaded.
57. Which of the following statements is correct?
- a. Static methods can be a virtual method.
  - b. Abstract methods can be a virtual method.
  - c. It is necessary to override a virtual method.
  - d. When overriding a method, the names and type signatures of the override method must be the same as the virtual method that is being overridden.
58. Which of the following statements is correct?
- a. The conditional logical operators cannot be overloaded.
  - b. When a binary operator is overloaded the corresponding assignment operator, if any, must be explicitly overloaded.
  - c. We can use the default equality operator in an overloaded implementation of the equality operator.
  - d. A public or nested public reference type does not overload the equality operator.
59. Which of the following modifier is used when a virtual method is redefined by a derived class?
- a. overloads
  - b. override
  - c. overrideable
  - d. virtual
60. Which of the following statements is correct?
- a. Only one object can be created from an abstract class.
  - b. By default methods are virtual.
  - c. If a derived class does not provide its own version of virtual method then the one in the base class is used.

- d. If the method in the derived class is not preceded by override keywords, the compiler will issue a warning and the method will behave as if the override keyword were present.

## Part II

### Indicate whether the following are True/False (T/F)

61. \_\_\_ When using the *ref* parameter modifier arguments must be assigned before leaving method scope.
62. \_\_\_ Like a *ref* parameter, an *out* parameter is passed by reference.
63. \_\_\_ Mandatory parameters and *params* modifiers must occur before *optional* parameters in both the method declaration and the method call.
64. \_\_\_ Static procedures access instance data.
65. \_\_\_ It is possible to invoke Garbage Collector explicitly.
66. \_\_\_ It is possible for you to prevent an object from being created by using zero argument constructor?
67. \_\_\_ C#.NET structures are always value types.
68. \_\_\_ An enum can be declared inside a class, struct, namespace or interface.
69. \_\_\_ The finally block is used to execute a given set of statements, whether exception is thrown or not.
70. \_\_\_ Generics are the same as generics in Java and templates in C++.

**Part III**  
**Fill-in the blanks**

71. Object Oriented Programming (OOP) is a style of programming in which your code is broken up into units, known as-----.
72. Pointer variable is used to hold the\_\_\_\_\_of the variable.
73. The size of the char pointer is -----?
74. The namespace in which the string class is built is -----.
75. ----- is the method used to remove white space from string?
76. The term ----- is used to refer to parameterized types in C#.
77. The ----- reference gets created when a member function (non-shared) of a class is called.
78. The space required for structure variables is allocated on the -----.
79. The ----- modifier must necessarily be placed as the last argument of a method.
80. The acronym CLR stands for -----.