

1. C# is a programming language, developed by ____.
 - a) Oracle
 - b) Microsoft**
 - c) GNU project
 - d) Google
2. C# runs on the ____.
 - a) .NET Framework**
 - b) Java Virtual Machine
 - c) Both A. and B.
 - d) None of the above
3. C# programming language is used to develop...
 - a) Web apps
 - b) Desktop apps
 - c) Mobiles apps
 - d) All of the above**
4. What is the extension of a C# language file?
 - a) .c
 - b) .cpp
 - c) .cs**
 - d) .csp
5. What is CLR in C#?
 - a) It is a virtual machine component of Microsoft .NET Framework**
 - b) It is a virtual machine component of JVM
 - c) It is a compiler to compile the C# code
 - d) All of the above
6. SOAP in C# stands for ____.
 - a) Standard Object Access Program
 - b) Standard Object Access Protocol
 - c) Simple Object Access Program
 - d) Simple Object Access Protocol**
7. Which of the following is true about the 'Update' method in the 'DataAdapter' class in ADO.NET?
 - a) It is used to execute SQL queries
 - b) It is used to establish a connection to a database
 - c) It is used to update data in a database based on changes in a DataSet**
 - d) It is used to retrieve data from a database
8. Which of the following operator returns the type of a class in C#?
 - a) sizeof
 - b) typeof**
 - c) &
 - d) *
9. Which of the following property of Array class in C# checks whether the Array has a fixed size?
 - a) IsStatic
 - b) Length
 - c) IsFixedSize**
 - d) None of the above
10. ____ is an example of visual objects.

- a) control objects
- b) ADO.NET**
- c) ASP.NET
- d) all of the above

11. The execution of the program begins with ____.

- a) Main()**
- b) get()
- c) class()
- d) display()

12. WriteLine is a ____.

- a) keyword
- b) literal
- c) function / method**
- d) class

13. In C#, 'using' is a ____.

- a) class
- b) directive**
- c) function
- d) keyword

14. framework has set of classes which are used to handle data access by connecting with different databases like SQL, Access, Oracle, etc.

- a) ADO.NET**
- b) ASP.NET
- c) C#.NET
- d) Visual Studio

15. An Int variable occupies ____ number of bytes

- a) 1
- b) 2
- c) 3
- d) 4**

16. ____ is a part of ADO.NET data provider which acts as a communicator between Dataset and the Data source.

- a) DataSet
- b) DataAdapter**
- c) DataView
- d) DataTable

17. A ____ type is a type whose fields consist of a fixed set of constants.

- a) enum**
- b) string
- c) struct
- d) array

18. C# does not support _____ statement.

- a) continue
- b) break
- c) goto
- d) go**

19. _____ is not an access modifier.

- a) public
- b) private
- c) protect**
- d) internal

20. "new" is used for _____ the objects.

- a) creating
- b) modifying
- c) allocating memory for**
- d) deallocating memory of

21. What is the purpose of the 'SqlCommand' class in ADO.NET?
- a) To define a function
 - b) To establish a connection to a database
 - c) To execute SQL queries**
 - d) To retrieve data from a database
22. What is the purpose of the 'SqlDataReader' class in ADO.NET?
- a) To define a function
 - b) To establish a connection to a database
 - c) To execute SQL queries
 - d) To retrieve data from a database**
23. Which of the following is true about pointers in C#?
- a) They are automatically dereferenced
 - b) They are useless
 - c) They are safer than references
 - d) They can point to managed or unmanaged memory**
24. What is the correct way to declare a jagged array in C#?
- a) `int[][] myArray;`**
 - b) `int[,] myArray;`
 - c) `int[,] myArray;`
 - d) `int[] myArray[];`
25. What is the purpose of the 'fixed' keyword in C#?
- a) To define a constant value
 - b) To specify that a parameter is passed by value
 - c) To specify that a parameter is passed by reference
 - d) To prevent the garbage collector from moving an object**
26. Which namespace is commonly used in C# for MySQL database connectivity?
- a) `System.Data.SqlClient`
 - b) `MySql.Data.MySqlClient`**
 - c) `Oracle.Data.OracleClient`
 - d) `System.Data.OracleClient`

27. Which namespace is commonly used in C# for SQL Server database connectivity?

- a) MySql.Data.MySqlClient
- b) System.Data.SqlClient**
- c) Oracle.Data.OracleClient
- d) Npgsql

28. Which data provider is commonly used in C# for Oracle database connectivity?

- a) MySql.Data.MySqlClient
- b) System.Data.SqlClient
- c) Oracle.Data.OracleClient**
- d) Npgsql

29. What is the purpose of the 'DataSet' class in ADO.NET?

- a) To establish a connection to a database
- b) To retrieve data from a database
- c) To store data retrieved from a database**
- d) To execute SQL queries

30. Which of the following is true about the 'DataAdapter' class in ADO.NET?

- a) It is used to execute SQL queries
- b) It is used to establish a connection to a database
- c) It is used to retrieve data from a database and populate a DataSet**
- d) It is used to connect to Oracle databases

31. What is the purpose of the 'Fill' method in the 'DataAdapter' class in ADO.NET?

- a) To establish a connection to a database
- b) To retrieve data from a database
- c) To populate a DataSet with data from a database**
- d) To execute SQL queries

32. C# has operator, useful for making two-way decisions.

- a) Conditional**
- b) Exponential
- c) Looping
- d) Functional

33. What is String in C# meant for?

- a) A variable
- b) A class**
- c) An Object
- d) An Array

34. The first step of configuring a Data Adapter is to select:

- a) An adapter object
- b) A database object
- c) A connection object**
- d) A dataset object

35. Which C# keyword is used to define a constant?

- a) define
- b) fixed
- c) constant
- d) const**

36. Which of the following options is not a Bitwise Operator in C#?

- a) &,!
- b) ^,~
- c) <<,>>
- d) +=,-=**

37. Which is the String method used to compare two strings with each other?

- a) CompareTo()
- b) Compare**
- c) Copy()
- d) ConCat

38. Which of the following is/are not types of arrays in C#?

- a) Single-Dimensional
- b) Multidimensional
- c) Jazzed array**
- d) Jagged arrays

39. Which of the following is a rectangular array?

- a) Single-Dimensional

b) Multidimensional

- c) Jagged arrays
- d) Jazzed array's

40. In C#, which keyword is used to declare and work with pointers?

- a) ptr
- b) point
- c) pointer
- d) unsafe**

41. What is the output of the following C# code snippet?

```
int x = 10;  
int y = 20;  
Console.WriteLine(x < y ? 'x is less than y' : 'x is greater than y');
```

- a) 'x is less than y'**
- b) 'x is greater than y'
- c) 'x is less than y' : 'x is greater than y'
- d) 'x is greater than y' : 'x is less than y'

42. Which of the following statements is true about the 'finally' block in C#?

- a) It must be preceded by a 'try' block
- b) It must be followed by a 'catch' block
- c) It must be followed by a 'finally' block
- d) It is executed regardless of whether an exception occurs or not**

43. What is the purpose of the 'try-catch' block in C#?

- a) To define a function
- b) To execute a block of code conditionally
- c) To handle exceptions**
- d) To execute a block of code repeatedly

44. Which of the following is true about jagged arrays in C#?

- a) They have a fixed size
- b) They can store elements of the same length
- c) They can store elements of different lengths**
- d) They are rectangular

45. What is the purpose of the 'ref' keyword in C#?
- a) To specify optional parameters in a method
 - b) To specify that a parameter accepts multiple values
 - c) To specify that a parameter is passed by value
 - d) To specify that a parameter is passed by reference**
46. What is the purpose of the 'param' keyword in C#?
- a) To specify optional parameters in a method
 - b) To specify that a parameter is passed by value
 - c) To specify that a parameter accepts multiple values**
 - d) To specify that a parameter is passed by reference
47. Which of the following is not a valid way to declare and initialize an array in C#?
- a) `int[] numbers = {1, 2, 3};`
 - b) `int[] numbers = new int[3];`
 - c) `int[] numbers = new int[] {1, 2, 3};`
 - d) `int[] numbers = new int(3);`**
48. Which of the following is true about multidimensional arrays in C#?
- a) They can only have two dimensions
 - b) They can have more than two dimensions**
 - c) They cannot store different types of data
 - d) They cannot be resized after initialization
49. Which of the following is not a valid control statement in C#?
- a) `break`
 - b) `continue`
 - c) `return`
 - d) `exit`**
50. What are the advantages of using pointers in C#?
- a) Increased performance
 - b) Enhanced control over memory
 - c) Ability to work with hardware devices
 - d) All of the above**
51. What are pointers used for in C#?

- a) To point to the next line of code
- b) To store memory addresses**
- c) To store and manipulate text
- d) To control the flow of execution

52. What is the purpose of structures in C#?

- a) To group related variables together**
- b) To define the structure of a program
- c) To declare functions
- d) To encapsulate data and behavior

53. Which loop in C# is guaranteed to execute at least once?

- a) for loop
- b) while loop
- c) do-while loop**
- d) foreach loop

54. What is the output of the following C# code snippet?

```
for (int i = 0; i < 5; i++)  
{  
    Console.Write(i);  
}
```

- a) 0 1 2 3 4**
- b) 1 2 3 4
- c) 0 1 2 3
- d) 0 1 2 3 4 5

55. Which of the following control statements in C# is used to execute a block of code if a condition is true?

- a) if**
- b) for
- c) while
- d) switch

56. What does C# type conversion refer to?

- a) Converting data from one type to another**
- b) Converting C# code to another programming language
- c) Converting a program's structure

d) None of the above

57. Which of the following is a keyword in C#?

- a) variable
- b) function
- c) class**
- d) print

58. Which of the following best describes the structure of C#?

- a) Sequential
- b) Functional
- c) Object-oriented**
- d) Procedural

59. Which of the following is true about ADO.NET in C#?

- a) It only supports SQL Server databases
- b) It is primarily used for web development
- c) It provides built-in classes and methods for database connectivity**
- d) It cannot handle transactions

60. What is the purpose of the 'SqlConnection' class in ADO.NET?

- a) To execute SQL queries
- b) To retrieve data from a database
- c) To define a function
- d) To establish a connection to a database**