1. **What is the .NET Framework?**
   o A) An operating system
   o B) A programming language
   o C) A software development framework
   o D) A database management system
   o **Answer:** C
2. **Which language is NOT supported by the .NET Framework?**
   o A) C#
   o B) VB.NET
   o C) Java
   o D) F#
   o **Answer:** C
3. **What is the CLR in .NET Framework?**
   o A) Common Language Runtime
   o B) Central Language Repository
   o C) Common Link Runtime
   o D) Common Language Repository
   o **Answer:** A
4. **What is the main function of the CLR?**
   o A) Code compilation
   o B) Memory management
   o C) Debugging
   o D) All of the above
   o **Answer:** D
5. **What does the .NET Framework Class Library (FCL) provide?**
   o A) A collection of reusable classes
   o B) A set of GUI components

- C) A collection of database schemas
- D) A set of network protocols
- **Answer:** A

6. **What is the primary purpose of ASP.NET?**
   - A) Creating desktop applications
   - B) Developing web applications
   - C) Managing databases
   - D) Writing device drivers
   - **Answer:** B

7. **What is the full form of ADO.NET?**
   - A) Active Data Object
   - B) Advanced Data Object
   - C) ActiveX Data Object
   - D) Advanced Development Object
   - **Answer:** C

8. **Which namespace is used for handling data in .NET Framework?**
   - A) System.Data
   - B) System.IO
   - C) System.Net
   - D) System.Web
   - **Answer:** A

9. **What is the use of the 'using' keyword in C#?**
   - A) To declare namespaces
   - B) To include system libraries
   - C) To ensure that resources are disposed of correctly
   - D) To handle exceptions
   - **Answer:** C

10. **Which tool is used for managing the Global Assembly Cache (GAC)?**
    - A) gacutil.exe
    - B) regasm.exe
    - C) sn.exe
    - D) ildasm.exe
    - **Answer:** A
11. **What does IL stand for in the context of .NET?**
    - A) Intermediate Language
    - B) Interlinked Language
    - C) Inherited Language
    - D) Integrated Language
    - **Answer:** A
12. **What is the extension of a compiled .NET assembly?**
    - A) .exe
    - B) .dll
    - C) .msi
    - D) Both A and B
    - **Answer:** D
13. **What is managed code?**
    - A) Code written in Java
    - B) Code executed by the CLR
    - C) Code written in HTML
    - D) Code managed by the operating system
    - **Answer:** B
14. **Which component in .NET Framework is responsible for garbage collection?**
    - A) CLR
    - B) BCL

- C) FCL
- D) GAC
- **Answer:** A

15. **What is the purpose of the JIT compiler in .NET?**
    - A) To interpret bytecode
    - B) To compile IL to native code at runtime
    - C) To manage memory allocation
    - D) To handle exceptions
    - **Answer:** B

16. **Which of the following is a data access technology in .NET?**
    - A) LINQ
    - B) Entity Framework
    - C) ADO.NET
    - D) All of the above
    - **Answer:** D

17. **What does the term 'boxing' refer to in .NET?**
    - A) Converting a value type to a reference type
    - B) Converting a reference type to a value type
    - C) Handling exceptions
    - D) Using interfaces
    - **Answer:** A

18. **What is the role of the Global Assembly Cache (GAC)?**
    - A) Storing .NET assemblies for shared use
    - B) Compiling source code
    - C) Managing database connections
    - D) Handling security policies
    - **Answer:** A

19.   **What is the difference between managed and unmanaged code in .NET?**
   o   A) Managed code is executed by the CLR, unmanaged code is not
   o   B) Unmanaged code is executed by the CLR, managed code is not
   o   C) Managed code is written in Java, unmanaged code in C#
   o   D) Unmanaged code is written in Java, managed code in C#
   o   **Answer:** A
20.   **Which attribute is used to mark a method as obsolete in .NET?**
   o   A) [Old]
   o   B) [Obsolete]
   o   C) [Deprecated]
   o   D) [Removed]
   o   **Answer:** B
21.   **Which assembly stores .NET Framework's base class library?**
   o   A) mscorlib.dll
   o   B) System.dll
   o   C) System.Core.dll
   o   D) System.Windows.dll
   o   **Answer:** A
22.   **What is the purpose of the 'finally' block in exception handling?**
   o   A) To handle exceptions
   o   B) To execute code regardless of whether an exception is thrown
   o   C) To declare local variables
   o   D) To catch exceptions
   o   **Answer:** B
23.   **Which namespace is used for threading in .NET?**
   o   A) System.Threading
   o   B) System.Timers

- C) System.Threading.Tasks
- D) System.Tasks
- **Answer:** A

24. **What does the 'static' keyword signify in C#?**
- A) The method or variable belongs to the class, not instances of the class
- B) The method or variable can be accessed outside the class
- C) The method or variable cannot be overridden
- D) The method or variable is constant
- **Answer:** A

25. **Which class is used for file I/O operations in .NET?**
- A) System.IO.File
- B) System.IO.Stream
- C) System.IO.Path
- D) System.IO.Directory
- **Answer:** A

26. **What is the full form of WPF?**
- A) Windows Presentation Framework
- B) Windows Process Framework
- C) Web Presentation Framework
- D) Web Process Framework
- **Answer:** A

27. **Which method is used to start a thread in .NET?**
- A) Begin()
- B) Start()
- C) Run()
- D) Execute()
- **Answer:** B

28. **What is the purpose of the 'lock' statement in C#?**
    ○ A) To prevent multiple threads from accessing a resource simultaneously
    ○ B) To lock a file
    ○ C) To encrypt data
    ○ D) To secure network connections
    ○ **Answer:** A
29. **Which technology is used for building service-oriented applications in .NET?**
    ○ A) WCF (Windows Communication Foundation)
    ○ B) WPF (Windows Presentation Foundation)
    ○ C) ADO.NET
    ○ D) LINQ
    ○ **Answer:** A
30. **Which .NET feature allows querying of data from different sources?**
    ○ A) LINQ (Language Integrated Query)
    ○ B) ADO.NET
    ○ C) Entity Framework
    ○ D) ASP.NET
    ○ **Answer:** A
31. **What is the purpose of reflection in .NET?**
    ○ A) To inspect metadata of assemblies
    ○ B) To execute SQL queries
    ○ C) To handle exceptions
    ○ D) To manage memory
    ○ **Answer:** A
32. **What does the 'sealed' keyword signify in C#?**
    ○ A) The class cannot be inherited
    ○ B) The class cannot be instantiated

- C) The class is abstract
- D) The class is static
- **Answer:** A

33. **Which type of application can be created using Xamarin?**
    - A) Web applications
    - B) Mobile applications
    - C) Desktop applications
    - D) Console applications
    - **Answer:** B

34. **What is a delegate in C#?**
    - A) A type that represents references to methods with a specific parameter list and return type
    - B) A variable that holds an address
    - C) A function pointer in C++
    - D) A method that handles exceptions
    - **Answer:** A

35. **Which attribute is used to make a method callable from COM?**
    - A) [ComVisible]
    - B) [DllImport]
    - C) [Interop]
    - D) [Serializable]
    - **Answer:** A

36. **What is the use of the 'params' keyword in C#?**
    - A) To pass a variable number of arguments to a method
    - B) To define parameters for a method
    - C) To declare constants
    - D) To handle exceptions
    - **Answer:** A

37. **Which of the following is NOT a value type in C#?**
   - A) int
   - B) float
   - C) bool
   - D) string
   - **Answer:** D
38. **What is the default access modifier for a class in C#?**
   - A) Public
   - B) Private
   - C) Internal
   - D) Protected
   - **Answer:** C
39. **Which of the following is a valid way to create an instance of a class in C#?**
   - A) ClassName obj = new ClassName();
   - B) ClassName obj = ClassName();
   - C) ClassName obj = CreateObject(ClassName);
   - D) ClassName obj = instantiate ClassName;
   - **Answer:** A
40. **Which method is used to compare two strings in C#?**
   - A) String.Compare()
   - B) String.Equals()
   - C) String.CompareTo()
   - D) All of the above
   - **Answer:** D
41. **What is the difference between 'const' and 'readonly' in C#?**
   - A) 'const' is evaluated at compile-time, 'readonly' at runtime
   - B) 'const' can be modified, 'readonly' cannot

- C) 'readonly' can be modified, 'const' cannot
- D) Both are the same
- **Answer:** A

42. **What is the base class of all .NET classes?**
   - A) System.Object
   - B) System.Base
   - C) System.Class
   - D) System.Type
   - **Answer:** A

43. **Which method must be overridden in a custom exception class?**
   - A) ToString()
   - B) GetMessage()
   - C) ToMessage()
   - D) Message()
   - **Answer:** A

44. **What is the purpose of the 'yield' keyword in C#?**
   - A) To pause and return control to the calling method
   - B) To return multiple values from a method
   - C) To handle exceptions
   - D) To create a new thread
   - **Answer:** A

45. **Which method is used to read a line of text from the console in C#?**
   - A) Console.Read()
   - B) Console.ReadLine()
   - C) Console.ReadText()
   - D) Console.ReadKey()
   - **Answer:** B

46. **Which keyword is used to inherit a class in C#?**
    - A) inherits
    - B) extends
    - C) implements
    - D) :
    - **Answer:** D
47. **What is the use of the 'abstract' keyword in C#?**
    - A) To declare a method that has no implementation
    - B) To declare a class that cannot be instantiated
    - C) Both A and B
    - D) None of the above
    - **Answer:** C
48. **Which of the following is true about an interface in C#?**
    - A) It can contain fields
    - B) It can contain methods with implementation
    - C) It can contain events
    - D) It cannot be inherited
    - **Answer:** C
49. **What does the 'partial' keyword allow in C#?**
    - A) To split the definition of a class or method across multiple files
    - B) To partially override a method
    - C) To declare a class as partial
    - D) To use partial methods
    - **Answer:** A
50. **What is the default return type of methods in C# if not specified?**
    - A) void
    - B) int

- C) object
- D) string
- **Answer:** A