**1. What is encapsulation in C#?**

a) The process of inheriting methods from another class  
b) The process of wrapping code and data together into a single unit  
c) The ability to define multiple methods with the same name  
d) The technique of hiding object details from the user  
**Answer:** b) The process of wrapping code and data together into a single unit

**2. Which access specifier allows access to class members from anywhere in the application?**

a) Private  
b) Protected  
c) Public  
d) Internal  
**Answer:** c) Public

**3. What is the default access specifier for class members in C# if none is explicitly mentioned?**

a) Public  
b) Private  
c) Protected  
d) Internal  
**Answer:** b) Private

**4. How can private variables in a class be accessed outside the class?**

a) Using the public keyword  
b) Through public getter and setter methods  
c) Declaring them as protected  
d) Directly accessing them using the instance of the class  
**Answer:** b) Through public getter and setter methods

**5. What does the protected access modifier do?**

a) Allows access only within the same class  
b) Allows access within the same class and its derived classes  
c) Allows access from anywhere in the application  
d) Allows access from only within the assembly  
**Answer:** b) Allows access within the same class and its derived classes

**6. What is the primary benefit of encapsulation?**

a) It allows direct access to class fields  
b) It makes code more complex and harder to maintain  
c) It enhances data security by restricting access  
d) It enables automatic code generation  
**Answer:** c) It enhances data security by restricting access

**7. What is the difference between private and internal access specifiers in C#?**

a) private allows access from anywhere, while internal restricts access to the same class  
b) private restricts access to the same class, while internal allows access within the same assembly  
c) private allows access to derived classes, while internal does not  
d) Both work the same way  
**Answer:** b) private restricts access to the same class, while internal allows access within the same assembly

**8. What happens if you try to access a private variable from another class?**

a) It will compile successfully  
b) It will result in a compilation error  
c) The variable will be accessible if it is in the same namespace  
d) It will be automatically converted to public  
**Answer:** b) It will result in a compilation error

**9. Which keyword allows both protected and internal access in C#?**

a) private protected  
b) public internal  
c) protected internal  
d) internal protected  
**Answer:** c) protected internal

**10. How does encapsulation support abstraction in object-oriented programming?**

a) It hides implementation details and exposes only necessary information  
b) It prevents objects from being instantiated  
c) It ensures all methods are static  
d) It enforces inheritance  
**Answer:** a) It hides implementation details and exposes only necessary information