**MCQ Questions and Answers on C# Namespaces**

1. **What is the primary purpose of a namespace in C#?**  
   a) To increase code execution speed  
   b) To organize classes and prevent name conflicts  
   c) To define new data types  
   d) To create database connections  
   **Answer:** b) To organize classes and prevent name conflicts
2. **Which keyword is used to define a namespace in C#?**  
   a) package  
   b) namespace  
   c) module  
   d) using  
   **Answer:** b) namespace
3. **What is the correct syntax to declare a namespace in C#?**  
   a) namespace { class MyClass { } }  
   b) namespace MyNamespace { class MyClass { } }  
   c) MyNamespace: namespace { class MyClass { } }  
   d) declare namespace MyNamespace { class MyClass { } }  
   **Answer:** b) namespace MyNamespace { class MyClass { } }
4. **How do you reference a class from another namespace without using using?**  
   a) ClassName.Method()  
   b) NamespaceName.Method()  
   c) NamespaceName.ClassName.Method()  
   d) import NamespaceName; ClassName.Method();  
   **Answer:** c) NamespaceName.ClassName.Method()
5. **What does the using keyword do in C#?**  
   a) It declares a namespace  
   b) It includes classes from another namespace without specifying their full path  
   c) It imports a file into the program  
   d) It creates an instance of a class  
   **Answer:** b) It includes classes from another namespace without specifying their full path
6. **Which of the following is a valid way to use multiple namespaces in a C# program?**  
   a) using System; using System.IO;  
   b) import System, System.IO;  
   c) #include System, System.IO;  
   d) use System, System.IO;  
   **Answer:** a) using System; using System.IO;
7. **What happens if two namespaces contain classes with the same name?**  
   a) The compiler merges them automatically  
   b) The compiler throws an error unless fully qualified names are used  
   c) The latest defined class overwrites the previous one  
   d) The program crashes at runtime  
   **Answer:** b) The compiler throws an error unless fully qualified names are used
8. **What is a nested namespace in C#?**  
   a) A namespace that contains another namespace inside it  
   b) A namespace that can be accessed only within the same file  
   c) A namespace that must be explicitly imported  
   d) A namespace with only private classes  
   **Answer:** a) A namespace that contains another namespace inside it
9. **How do you reference a class from a nested namespace?**  
   a) NestedNamespace.ClassName  
   b) ParentNamespace::NestedNamespace.ClassName  
   c) ParentNamespace.NestedNamespace.ClassName  
   d) NestedNamespace::ClassName  
   **Answer:** c) ParentNamespace.NestedNamespace.ClassName
10. **Which statement is true about namespaces in C#?**  
    a) A C# program must have at least one namespace  
    b) A namespace can contain only one class  
    c) A namespace can contain multiple classes, interfaces, and other namespaces  
    d) Namespaces cannot be nested  
    **Answer:** c) A namespace can contain multiple classes, interfaces, and other namespaces