**1. What is the main advantage of using Generics in C#?**

a) Reduces code reusability  
b) Allows methods and classes to work with any data type  
c) Makes code less efficient  
d) Increases memory consumption

**Answer:** b) Allows methods and classes to work with any data type

**2. Which keyword is used to define a generic class in C#?**

a) template  
b) T  
c) generic  
d) var

**Answer:** b) T

**3. What is the namespace that contains generic collection classes in C#?**

a) System.Collections  
b) System.Generic  
c) System.Collections.Generic  
d) System.Linq

**Answer:** c) System.Collections.Generic

**4. What will be the output of the following generic class implementation?**

MyGenericArray<int> intArray = new MyGenericArray<int>(3);

intArray.setItem(0, 10);

intArray.setItem(1, 20);

intArray.setItem(2, 30);

Console.Write(intArray.getItem(1));

a) 10  
b) 20  
c) 30  
d) Compilation Error

**Answer:** b) 20

**5. What are the benefits of using Generics in C#?**

a) Code reusability  
b) Type safety  
c) Improved performance  
d) All of the above

**Answer:** d) All of the above

**6. How do you declare a generic method in C#?**

a) void GenericMethod<> (T value) {}  
b) void GenericMethod(T value) {}  
c) void GenericMethod<T> (T value) {}  
d) T void GenericMethod(T value) {}

**Answer:** c) void GenericMethod<T> (T value) {}

**7. Which of the following statements is true about generic classes in C#?**

a) A generic class can only accept int data type  
b) Generic classes are less efficient than non-generic classes  
c) Generics allow a class to be parameterized with a data type  
d) Generics cannot be used with collections

**Answer:** c) Generics allow a class to be parameterized with a data type

**8. Which of the following is an example of a generic delegate in C#?**

a) delegate T NumberChanger<T>(T n);  
b) delegate int NumberChanger(int n);  
c) delegate void NumberChanger();  
d) delegate NumberChanger<T>(T n);

**Answer:** a) delegate T NumberChanger<T>(T n);

**9. What is the role of constraints in generic classes?**

a) They limit the types that can be used as parameters in generic classes  
b) They increase performance  
c) They reduce type safety  
d) They make the code less readable

**Answer:** a) They limit the types that can be used as parameters in generic classes

**10. How do you swap two variables using a generic method in C#?**

a) Using dynamic type  
b) Using ref keyword with a generic type  
c) Using an object type for parameters  
d) Swapping is not possible with generics

**Answer:** b) Using ref keyword with a generic type