1. **What is the primary purpose of nullable types in C#?**  
   a) To store only integer values  
   b) To allow a variable to store null in addition to its normal value range  
   c) To convert data types dynamically  
   d) To prevent null references

**Answer:** b) To allow a variable to store null in addition to its normal value range

1. **Which of the following is the correct syntax for declaring a nullable integer in C#?**  
   a) int num = null;  
   b) int? num = null;  
   c) Nullable int num = null;  
   d) var num = Nullable<int>();

**Answer:** b) int? num = null;

1. **What will be the output of the following code?**

int? num1 = null;

int? num2 = 45;

Console.WriteLine(num1 ?? num2);

a) 0  
b) 45  
c) null  
d) Compilation error

**Answer:** b) 45

1. **Which operator is used to provide a default value for a nullable type when it contains null?**  
   a) &&  
   b) ??  
   c) ?:  
   d) =>

**Answer:** b) ??

1. **What will be the value of num3 after executing the following code?**

double? num1 = null;

double? num2 = 3.14157;

double num3 = num1 ?? 5.34;

a) 3.14157  
b) null  
c) 5.34  
d) Compilation error

**Answer:** c) 5.34

1. **What happens if you try to assign null to a non-nullable value type like int in C#?**  
   a) It will compile and execute normally  
   b) It will cause a runtime exception  
   c) It will cause a compilation error  
   d) It will automatically convert to zero

**Answer:** c) It will cause a compilation error

1. **How do you explicitly define a nullable type using Nullable<T>?**  
   a) Nullable<int> num = null;  
   b) int? num = new Nullable<int>();  
   c) var num = Nullable<int>();  
   d) Both a and b

**Answer:** d) Both a and b

1. **Which of the following statements about nullable types is TRUE?**  
   a) Nullable types are reference types  
   b) Nullable types can only be used with int and double  
   c) Nullable types are value types  
   d) Nullable types cannot store boolean values

**Answer:** c) Nullable types are value types

1. **What is the output of the following code?**

bool? flag = new bool?();

Console.WriteLine(flag);

a) true  
b) false  
c) null  
d) Compilation error

**Answer:** c) null

1. **What does num1 ?? num2 return when num1 is not null?**  
   a) The value of num1  
   b) The value of num2  
   c) null  
   d) Compilation error

**Answer:** a) The value of num1