



# Certified C# Programmer (CSHP)

## Ten Sample Questions

These ten questions are written at the difficulty of the live exam. Six carry a figure, a data table, a configuration or a code listing; four are plain scenario questions, as on the live paper. Every one is a scenario a working C# programmer would meet, and none of them appears in the live question bank.

The live exam is multistage adaptive: how you score on one stage selects the difficulty of the next, so no two candidates sit the same paper. It is a performance-based exam: each form can carry up to 5 to 12 performance-based questions alongside the multiple-choice questions, which means you build, sequence or complete something rather than only choosing from a list. Answers and full explanations follow each question here; the live exam does not disclose item-level answers.

### Question 1

Domain 1: C# Fundamentals and Syntax

[CONFIG](#)

Sarah Miller reviews a short block that uses implicit typing.

```
var count = 10;  
var name = "Sarah";  
const double Pi = 3.14;  
count = count + 5;
```

Listing 1.1 Implicit typing with var.

What type does var give count?

- ☐ A int
- ☐ B object
- ☐ C double
- ☐ D string

#### Correct answer: A

The var keyword infers the type from the initializer, so count is int because 10 is an int literal. The variable is still statically typed, and any later assignment must keep that same type.

### Question 2

Domain 2: Types, Collections and Generics

[DATA](#)

James Carter sorts several types by kind, with one example missing.

| Kind           | Example     |
|----------------|-------------|
| Value type     | int         |
| Value type     | struct      |
| Reference type | (to choose) |
| Value type     | bool        |

Table 2.1 Types grouped by kind.

Which one is a reference type?

- ☐ A double
- ☐ B bool
- ☐ C string
- ☐ D int

**Correct answer: C**

A class type such as string is a reference type stored on the heap and reached through a reference. The int, bool, and double types are value types that hold their data directly.

**Question 3**

Domain 3: Control Flow and Methods

CONFIG

Emma Wilson traces a loop that totals an array where nums holds 2, 4 and 6.

```
int sum = 0;
foreach (int n in nums)
{
    sum += n;
}
```

Listing 3.1 Summing an array.

What is the value of sum?

- ☐ A 6
- ☐ B 12
- ☐ C 8
- ☐ D 24

**Correct answer: B**

The foreach adds each element to sum, so 2 plus 4 plus 6 gives 12. Each pass binds n to the next value and updates the running total until the array ends.

**Question 4**

Domain 4: Object-Oriented Programming

CONFIG

David Brown reads a base class and a derived class that replace a method.

```
class Animal
{
    public virtual string Speak() => "...";
}
class Dog : Animal
{
    public override string Speak() => "Woof";
}
```

Listing 4.1 A base method and its replacement.

Which keyword in Dog replaces the base method?

- ☐ A new
- ☐ B sealed
- ☐ C static
- ☐ D override

**Correct answer: D**

The override keyword in Dog replaces the base virtual method, so calls resolve to the Dog version through polymorphism. Using new would hide rather than override, and sealed or static do not apply here.

## Question 5

Domain 5: LINQ, the .NET Library and Tooling

CONFIG

Olivia Davis reads a LINQ chain where nums holds 1, 2, 3 and 4.

```
var evens = nums
    .Where(n => n % 2 == 0)
    .Select(n => n * 10);
```

Listing 5.1 Filter then project.

What sequence does evens hold?

- ☐ A 2, 4
- ☐ B 10, 20, 30, 40
- ☐ C 20, 40
- ☐ D 1, 3

**Correct answer: C**

Where keeps 2 and 4, then Select multiplies each by 10, producing 20 and 40. LINQ chains the filter before the projection, and execution is deferred until the sequence is enumerated.

## Question 6

Domain 6: Exceptions, Async and Best Practices

DATA

Liam Anderson maps each keyword to its role, with one role missing.

| Keyword | Role             |
|---------|------------------|
| try     | Guard risky code |
| catch   | Handle the error |
| finally | (to choose)      |
| throw   | Raise an error   |

Table 6.1 Exception keywords and roles.

What does the finally block do?

- ☐ A Retry the block
- ☐ B Run cleanup code
- ☐ C Ignore all errors
- ☐ D Skip the catch

**Correct answer: B**

The finally block runs cleanup whether or not an exception occurred, which makes it ideal for releasing resources. It executes after try or catch completes and does not swallow errors on its own.

**Question 7**

Domain 1: C# Fundamentals and Syntax

A method declares an int variable and tries to store the value 3.5 into it directly, with no cast. What happens?

- ☐ A Compile error
- ☐ B Silently rounds
- ☐ C Stores as 3
- ☐ D Converts to double

**Correct answer: A**

Assigning a decimal literal to an int without a cast fails at compile time because C# does not implicitly narrow double to int. The developer must cast on purpose or pick a floating-point type, which prevents silent data loss.

**Question 8**

Domain 2: Types, Collections and Generics

A developer wants a collection that stores only strings and flags any wrong type at compile time. Which choice fits best?

- ☐ A ArrayList
- ☐ B boxed object list
- ☐ C object array

**D** List<string>

**Correct answer: D**

A generic List of string gives compile-time type safety, so storing a non-string value is caught before the program runs. ArrayList and object arrays hold anything and push type errors to run time.

**Question 9** Domain 4: Object-Oriented Programming

A class exposes its fields as public so any code can change them freely, and its invariants keep breaking. Which principle restores control?

- A** More inheritance
- B** Static fields
- C** Encapsulation
- D** Public setters

**Correct answer: C**

Encapsulation hides fields behind properties or methods so the class controls how its state changes and protects its invariants. Public fields remove that control, while more inheritance or static fields do not address the leak.

**Question 10** Domain 6: Exceptions, Async and Best Practices

A method catches the base Exception type and then does nothing in the block, hiding real failures. What is the better practice?

- A** Swallow silently
- B** Catch specific types
- C** Disable all exceptions
- D** Remove try blocks

**Correct answer: B**

Catching specific exception types lets the code handle the failures it understands and lets the rest surface for proper attention. An empty catch of the base Exception hides bugs and makes faults hard to diagnose.