

**1. What is the primary purpose of Inversion of Control (IoC) in the Spring Framework?**

- A) To allow objects to define their own dependencies
- B) To transfer the control of object creation and wiring from the application to the Spring container
- C) To improve the performance of Java applications
- D) To reduce the amount of XML configuration required

**2. In Spring XML bean configuration, which attribute is used to specify the unique identifier of a bean?**

- A) name
- B) class
- C) id
- D) beanId

**3. Which type of dependency injection involves the Spring container injecting dependencies via a bean's setter methods?**

- A) Constructor Injection
- B) Setter Injection
- C) Interface Injection
- D) Method Injection

**4. When using constructor injection in Spring, how are constructor arguments specified in XML configuration?**

- A) Using <property> elements
- B) Using <constructor-arg> elements
- C) Using <arg> elements
- D) Using <param> elements

**5. What is the default bean scope in the Spring Framework?**

- A) prototype
- B) request

- C) session
- D) singleton

**6. Which autowiring mode in Spring uses the bean's property name to find a matching bean in the container?**

- A) byType
- B) byName
- C) constructor
- D) autodetect

**7. In the context of Dependency Injection (DI), what is being injected?**

- A) The Spring container itself
- B) The bean's lifecycle methods
- C) Dependencies that a bean needs to function
- D) The bean's configuration metadata

**8. Which bean scope creates a new bean instance each time it is requested from the container?**

- A) singleton
- B) prototype
- C) global-session
- D) application

**9. In Spring XML configuration, which element is used to define a bean?**

- A) `<bean>`
- B) `<object>`
- C) `<component>`
- D) `<spring-bean>`

**10. What is the main difference between constructor injection and setter injection?**

- A) Constructor injection uses the `<property>` element while setter injection uses `<constructor-arg>`

- B) Constructor injection provides immutability and ensures required dependencies, while setter injection provides flexibility for optional dependencies
- C) Constructor injection can only be used with singleton beans
- D) Setter injection is faster than constructor injection

**Answer Key:**

1. B) To transfer the control of object creation and wiring from the application to the Spring container
2. C) id
3. B) Setter Injection
4. B) Using `<constructor-arg>` elements
5. D) singleton
6. B) byName
7. C) Dependencies that a bean needs to function
8. B) prototype
9. A) `<bean>`
10. B) Constructor injection provides immutability and ensures required dependencies, while setter injection provides flexibility for optional dependencies