

## Spring Framework & Spring Boot Quiz — Answer Key

1. What is the main functionality of Spring Initializr in the development process?

☒ Generating Spring Boot projects efficiently

2. When configuring beans in Spring, which method allows defining bean scope using Java annotations?

☒ Applying the @Scope annotation on a bean class

3. Which module of the Spring Framework is primarily used for dependency injection?

☒ Spring Core Container

4. Which of the following best describes the key advantage of using Spring Boot over traditional Spring framework?

☒ Spring Boot simplifies the setup process and reduces configuration overhead

5. Which of the following is a benefit of using Spring Boot within the Spring framework?

☒ It simplifies the setup and development of Spring applications

6. Which type of Spring IoC container is most suitable for lightweight applications and simple bean management?

☒ BeanFactory container

7. Which component of a Spring application is responsible for managing object lifecycles and configuring dependencies?

☒ Spring Container

8. How does the MVC pattern contribute to the development of web applications using the Spring Framework?

☒ It separates the application into three interconnected components, allowing for efficient role separation

9. How can Spring Initializr assist in setting up a Spring Boot project effectively?

☒ By generating project structure and dependencies

10. What are the core benefits of using Spring Boot in application development?

☒ Rapid development and deployment capabilities

11. Which layer in Spring Boot architecture is responsible for handling business logic?

☒ Business layer

12. What is the primary purpose of the Spring Framework in Java?

- ✓ To develop flexible, lightweight, and focused applications

13. How does the Spring framework utilize inversion of control containers?

- ✓ Managing object creation and dependencies throughout the application lifecycle

14. In setting up a dynamic web project in Eclipse, what is the role of Apache Tomcat?

- ✓ It serves as a web server to host and run web applications

15. How does Spring Boot's configuration differ from that of traditional Spring framework?

- ✓ Spring Boot uses convention over configuration to reduce manual setup

16. What are the benefits of using Spring Boot in developing Java applications?

- ✓ It simplifies the configuration and setup process, allowing rapid application development

17. In the context of Spring Boot architecture, what is the primary purpose of the presentation layer?

- ✓ Managing user interaction

18. What tool is commonly used to build and manage Spring projects in Eclipse?

- ✓ Maven

19. Which of the following statements best describes constructor-based dependency injection in Spring?

- ✓ Dependencies are passed as constructor parameters, allowing immutable configurations

20. What is the primary role of a Spring IoC container in an application context?

- ✓ Managing bean instantiation, assembly, lifecycle, and dependencies