1) What is a spring?

Spring is set to be a framework which helps Java programmer for development of code and it

provides IOC container, Dependency Injector, MVC flow and many other APIs for the java

programmer.

2) What is the default scope of bean in Spring framework?

The default scope of bean is Singleton for Spring framework.

3) What are the benefits of Spring Framework?

Following are the benefits of Spring framework:

• Extensive usage of Components

• Reusability

• Decoupling

• Reduces coding effort by using pattern implementations such as singleton, factory, service

locator etc.

• Declarative transaction management

4) What is Bean Factory?

Bean Factory is core of the spring framework and, it is a Lightweight container which loads bean

definitions and manages your beans. Beans are configured using XML file and manage singleton

defined bean. It is also responsible for life cycle methods and injects dependencies.

5) What is called Spring MVC?

A Spring MVC is a single shared controller instance and it is used to handle request type

controllers, interceptors which run in the IoC container. It also allows multiple Dispatcher Servlets

which can share application context interface but not class based interface.

6) Why Spring framework is needed?

Spring framework is needed because it is -

• Very Light Weight Container

• Framework

• IOC

• AOP

7) Name the various modules used in spring framework?

• AOP module (Aspect Oriented Programming)

• JDBC abstraction and DAO module

• The Core container module

• MVC framework module

• Application context module

• O/R mapping integration module (Object/Relational)

• Web module

8) What is a BeanFactory Interface?

Bean factory interface is used to provide configuration framework for object creation and basic

functionality around object management.

9) State the differences between ApplicationContext and BeanFactory in spring?

• ApplicationContext allows more than one config files to exist while BeanFactory only

permits one.

• ApplicationContext can print events to beans registered as listeners. This feature is not

supported by BeanFactory.

• ApplicationContext also provides support for application of lifecycle events,

internationalization messages and validation and also provides services like EJB integration,

remoting, JNDI access and scheduling. These features too are not supported by Bean

Factory.

10) What is Auto Wiring?

Autowiring is used to build relationships between the collaborating beans. Spring container can

automatically resolve collaborators for beans.

11) What are the different Modes of Autowiring?

Autowiring has five different modes:

• no: no autowire

• byName : Autowiring that can be done by property name

• byType : property type as autowired

• constructor: It is similar to byType and it is property is in constructor

• autodetect : Spring is allowed to select autowiring from byType or constructor

12) How to start using spring?

Following steps needs to be done to start with the Spring:

• Download Spring and its dependent file from spring’s site.

• Create application context xml to define beans and its dependencies

• Integrate application context xml with web.xml

• Deploy and Run the application

13) Differentiate between singleton and prototype bean?

Singleton means only one bean is defined per object instance while Prototype means one

definition to more than one object instances in Spring.

14) What are the types of Dependency Injection?

Two types of dependency injection are supported by spring framework:

• Setter Injection

• Constructor Injection

15) Write about Core container module?

Core container module is responsible for the basic functionality of the spring framework. The

whole Spring framework is built with this module as a base.

16) What is IOC?

IOC (Inversion of Control pattern) is also known as dependency injection. IOC directs the

programmers to depict how to create objects instead of actually creating them. But in this design

pattern, this control has been given to assembler and assembler will instantiate required class if

needed.

17) What is a Joinpoint?

The point where an aspect can be introduced in the application is known as a joinpoint. This point

could be a field being modified, a method being called or even an exception being thrown. At

these points, the new aspect’s code can be added to introduce a new behavior to the application.

Container

18)When should we go for Setter Injection and When should we go for Constructor Injection ?

: If bean class contains only one property or if all properties of bean class should proper participate in dependency injection , then we should go for Constructor Injection, because this injection is bit faster than Setter Injection. If bean class contains more than one property and there is no need of making all properties participating dependency injection then we need to go for Setter Injection.

19) How many types of bean scopes in spring ?

ANS : We can make IOC container keeping our spring bean class object in different scopes .

Spring has 5 scopes :

1. Singleton

2. Prototype

3. Seasion

4. Request

5. Global Session

Default scope for bean is singleton.

20) What is the spring bean life cycle methods ?

ANS : It talks about spring bean class object creation to destruction.

Spring Beans allows two life cycle methods :

A. init method :

Execute after all dependency injections. So can be used to verify whether injections are properly done or not.

B. destroy method :

Executes when IOC container is about to destroy our bean class object. Useful to place unintiallization logic.