

1. Does Spring provide programmatic transaction management ? Select a unique answer.

- a. Yes using the @Transactional bean post processor
- b. Yes with the TransactionTemplate class
- c. Yes with the TransactionService class
- d. Yes using the @Transactional bean post processor

2. How could you externalize constants from a Spring configuration file or a Spring annotation into a .properties file ? Select one or more

- a. By using the <context:property-placeholder /> tag
- b. By using the <util:constant /> tag
- c. By declaring the ConstantPlaceholderConfigurer bean post processor
- d. By using the c: namespace

3. To validate Java beans in a web application using annotations.

- a) XML
- b) Java Based
- c) JAR-303 standard
- d) All of the mentioned

4. Annotation used to indicate a field has to have a minimum of 2 characters.

- a) @NotNull
- b) @Size
- c) @MaxSize
- d) @size

5. Spring MVC supports generating Excel files using which of the following libraries.

- a) Apache POI library
- b) JExcelAPI library
- c) All of the mentioned

d) None of the mentioned

6. Interface for Dispatcher Servlet to auto detect view resolver beans.

a) **localeResolver**

b) tiles

c) ViewResolver

d) none of the mentioned.

7. By default, XmlViewResolver loads view beans from /WEB-INF/views.xml which is final.

a) True

b) **False**

8. Views that can't be resolved by InternalResourceViewResolver.

a) redirect

b) redirect:prefix

c) redirect:suffix

d) **all of the mentioned**

9. Annotation which allows a controller's field to be assigned using Spring Expression Language (SpEL)

a) **@Value**

b) @After

c) @Default

d) @None

10. SpEL statements are recognizable.

a) **True**

b) False

11.To publish a REST service with Spring.

- a) publishing an application's data as a REST service
- b) accessing data from third-party REST services
- c) none of the mentioned
- d) all of the mentioned

12. Publishing an application's data as a REST service requires.

- a) @RequestMapping
- b) @PathVariable
- c) All of the mentioned
- d) None of the mentioned

13.Annotation added as an input parameter to the handler method.

- a) @PathVariable
- b) @Path
- c) @PathLocale
- d) None of the mentioned

14. Which of the following statements is true regarding the @ResponseStatus annotation ?

- a. @ResponseStatus is detected on nested exceptions
- b.The ExceptionHandlerExceptionResolver uses the @ResponseStatus annotation to map exception to HTTP status code
- c. A controller handler is annotated with the @ResponseStatus, the response status set by RedirectView takes precedence over the annotation value.
- d. The @ResponseStatus annotation can go on a @RequestMapping method or a @RestController class or a business exception class.

15. Default localeResolver used by Spring.

- a) AcceptHeaderLocale
- b) AcceptHeader
- c) AcceptHeaderLocaleResolver
- d) AcceptLocaleResolver

16. Alternative way to resolve locales.

- a) AcceptHeaderLocale
- b) AcceptHeader
- c) AcceptHeaderLocaleResolver
- d) SessionLocaleResolver

17. General-purpose class that allows a response to be rendered using a marshaller.

- a) MarshallingView
- b) Marshalling
- c) View
- d) All of the mentioned

18. Annotation which allows the Jaxb2Marshaller marshaller to detect a class's (i.e., object's) fields.

- a) @XmlRootElement
- b) @XmlRoot
- c) @NotNull
- d) None of the mentioned

19. How to auto-inject into a field a Spring bean by its name? Select one or more answer choices.

- a. By using both the @Autowired and the @Qualifier Spring annotations
- b. By using the @Autowired annotation and naming the field with the bean name
- c. With the name attribute of the @Autowired annotation
- d. By using the single @Qualifier annotation

20. Considering 2 classes AccountServiceImpl and ClientServiceImpl. Any of these 2 classes inherits from each

other. What is the result of the following pointcut expression ?

```
execution(* *..AccountServiceImpl.update(..))  
&& execution(* *..ClientServiceImpl.update(..))
```

- a.No joint point is defined
- b.Matches public update methods of the 2 classes, whatever the arguments
- c.Matches any update methods of the 2 classes, whatever the arguments and method visibility
- d.Matches any update methods of the 2 classes, with one more arguments and whatever method visibility

21. Select the right statement about referring a Spring configuration file inside the package com.example.myapp in the below example ?

```
ApplicationContext context = new
```

```
ClassPathXmlApplicationContext("classpath:/com.example.myapp.config.xml")  
;
```

- a. all of the above
- b. The classpath: prefix could be omitted
- c.Package name using the dot character is not well formatted
- d.The slash character preceding com.example could be omit

22. Using the Spring AOP framework, what is the visibility of the method matches by the following join point ?

```
@Pointcut("execution(* *(..))")  
private void anyOperation() {};
```

- a. Public methods
- b. All methods, whereas their visibility
- c.All methods, except private method
- d. Protected and public methods

23. What the name of the bean defined in the following configuration class ?
Select a single answer.

```
@Configuration
public class ApplicationConfig {
    @Autowired
    private DataSource dataSource;
    @Bean
    ClientRepository clientRepository() {
        ClientRepository accountRepository = new JpaClientRepository();
        accountRepository.setDataSource(dataSource);
        return accountRepository;
    }
}
```

- a. clientRepository
- b. JpaClientRepository**
- c. jpaClientRepository
- d. Two beans are defined: a data source and a repository

24. Which of the following is true regarding the below Spring controller ?

```
@RestController
public class OwnerController {
    @RequestMapping(value = "/owner/{ownerId}", method =
        RequestMethod.POST)
    @ResponseBody
    public Owner findOwner(@PathVariable("ownerId") int ownerId) {
        return new Owner();
    }
}
```

- a. RequestMethod.GET method is more accurate than POST
- b. @ResponseBody could be removed
- c. @PathVariable should be replaced with the @PathParam annotation**
- d. Returning the 201 HTTP status code is better

25. What is an advice ? Select a unique answer.

- a. An action taken by an aspect at a particular join point
- b. A point during the execution of a program
- c. An aspect and a pointcut
- d. A predicate that matches join points

26. What is the easiest method to write a unit test ?

- a. `@RequestMapping("/displayAccount")`
`String displayAccount(@RequestParam("accountId") int id, Model model)`
- b. `void displayAccount(HttpServletRequest req, HttpServletResponse resp)`
`throws ServletException,`
`IOException`
- c. `void displayAccount(HttpServletRequest req, HttpSession Session)`
`throws ServletException, IOException`
- d. `@RequestMapping("/displayAccount")`
`String displayAccount(@PathVariable("accountId") int id, Model model)`

27. Select method's signatures that match with the following pointcut:

`execution(* com.test.service..*.*(*))`

- a. `void com.test.service.MyServiceImpl#transfert(Money amount)`
- b. `void com.test.service.account.MyServiceImpl#transfert(Money amount)`
- c. `void com.test.service.MyServiceImpl#transfert(Account account, Money amount)`
- d. `void com.test.service.account.MyServiceImpl#transfert(Account account, Money amount)`
- e. None of the above

28. Given the following configuration class, what are the correct affirmations ?
Select one or more answers.

```
public class ApplicationConfig {  
    private DataSource dataSource;  
    @Autowired  
    public ApplicationConfig(DataSource dataSource) {
```

```
this.dataSource = dataSource;
}
@Bean(name="clientRepository")
ClientRepository jpaClientRepository() {
return new JpaClientRepository();
}
}
```

- a. Configuration annotation is missing
- b. Default or no-arg constructor is missing
- c. @Bean name is ambiguous
- d. @Bean scope is prototype

29. Using JdbcTemplate, what is the Spring provided class you will use for result set parsing and merging rows into a single object ? Select a unique answer.

- a. ResultSetExtractor
- b. RowMapper
- c. RowCallbackHandler
- d. ResultSetMapper

30. Spring-WS provides various abstract endpoint classes for you to process the request.

- a) org.springframework.ws.server.endpoint
- b) org.springframework.ws.server
- c) org.springframework.*
- d) none of the mentioned

31. Which method is used to gracefully shutdown all the bean processes after closing the spring container ?

- A. shutdownHook
- B. destroy method
- C. none of the mentioned
- D. all of the mentioned

32. Declaring bean from object properties can be done using:-

- A. PropertyPathFactoryBean
- B. util:constant
- C. None of the mentioned
- D. All of the mentioned

33. What are the ways to create custom Property Editors ?

- A. implement PropertyEditor interface
- B. extend PropertyEditorSupport Class
- C. none of the mentioned
- D. all of the mentioned

34. Spring Web MVC (and in Spring in general) is the "Open for extension, closed for modification" principle. The reason that this principle is being mentioned here is because a number of methods in the core classes in Spring Web MVC are marked final.

- A. true
- B. false

35. Which of the among is not a special bean in WebApplicationContext ?

- a. Locale resolver
- b. Theme resolver
- c. multipart file
- d. resolver
- e. Handler exception resolver
- f. Handler mappings
- g. Non of the above

36. How the Spring DispatcherServlet supports for returning the last-modification-date, as specified by the Servlet API ?

- a. By implementing the LastModified interface
- b. By implementing the LastSessionModified interface
- c. By implementing the LastDateModified interface
- d. By implementing the LastModifiedDate interface

37. @RequestMapping annotation is used to map a HTTP request method (GET or POST) to a specific class or method in the controller which will handle the respective request ?

1. false

2. true

38. Which of the following exception classes is related to all the exceptions thrown in spring applications ?

1. DataAccessException

2. ArrayIndexOutOfBoundsException.

3. NullPointerException.

4. SpringException.

5. None of these.

39. Which of the following is true for Controllers in Spring ?

1. An abstract class.

2. An interface.

3. Concrete class.

4. Final class.

5. None of these.

40. Annotations work as metadata for classes and Spring uses annotations as an alternative to XML for declarative configuration. Is it true or false ?

1. false

2. true

41. Which of the following specify the points where weaving can be applied ?

1. Compile Time , Classload Time , load time.

2. Compile Time , Classload Time , Runtime

3. Compile Time and Runtime.

4. Compile Time and Classload Time.

5. None of these.

42. Which of the following layers the @Controller annotation is used in ?

1. Business layer
2. Service layer.
3. Presentation layer.
4. Session layer.
5. None of these.

43. Which Of The Following Is Not A Valid Difference Between @Inject And @Autowired Annotations ?

1. @Inject annotation is part of Java EE 7's Context and Dependency Injection framework while @Autowired is the Spring Frameworks own implementation
2. @Autowired is a legacy annotation whereas @Inject is its latest version..
3. There is no difference and both can be used interchangeably.
4. None of these.

44. Which of the following statements is true ?

1. BeanFactory extends ApplicationContext.
2. ApplicationContext extends BeanFactory.
3. ApplicationContext implements BeanFactory.
4. BeanFactory implements ApplicationContext
5. None of these.

45. Which of the following is advice supported by Aspect Annotation ?

- A. @Before
- B. @After
- C. @AfterReturning
- D. All of the mentioned

46. Which advice is executed only when joint point returns or throws an exception ?

- A. @Before
- B. @After
- C. @AfterReturning
- D. @AfterThrowing

47. Special compiler used during weaving

A. jvm B. gcc

C. ajc

D. none of the mentioned

48. How to inject Spring bean into domain objects

A. AOP

B. XML C. AspectJ

D. Java Based

49. Method used to process bean before initialization callback

A. scope

B. postProcessAfterInitialization()

C. postProcessBeforeInitialization()

D. it's own constructor

50. Which attribute is used to set the scope of the bean ?

A. setScope

B. scope

C. getScope

D. none of the mentioned

51. Which attribute is used to specify classname of the bean ?

A. name

B. id

C. class

D. constructor-args

52. Which tag is also allowed by static field ?

A. util:constant

B. list C. set D. Constructor-args

53. How before advice works ?

A - Run advice before a class loads.

B - Run advice before a method execution.

C - Run advice before http response is to be returned.

D - Run advice before http request is to be processed.

54 - What is Introduction ?

A - An introduction represents a point in your application where you can plug-in AOP aspect.

B - This is used to inject values in objects.

C - This is not invoked during program execution by Spring AOP framework.

D - An introduction allows you to add new methods or attributes to existing classes.

55 - How to use ref keyword in beans.

xml ?

A - Using setter method only.

B - Using constructor argument only.

C - Using setter method and constructor argument both.

D - None of the above.

56- How do you turn on annotation wiring ?

A - Add <annotation-context:config /> to bean configuration.

B - Add <annotation-config /> to bean configuration.

C - Add <annotation-context-config /> to bean configuration.

D - Add <context:annotation-config /> to bean configuration.

57 - What is Join point ?

A - This represents a point in your application which joins two objects.

B - This represents a point in your object where you join values.

C - This represents a point in your object where you join injected values.

D - This represents a point in your application where you can plug-in AOP aspect.

58 - What are the different points where weaving can be applied ?

A - Compile time, load time

B - Compile time, run time

C - Run time

D - Compile time, load Time, Run time

59 - Which of the following database is not supported using jdbcTemplate ?

A - MySql

B - PostgresSql

C - NoSql

D - Oracle

60. What is bean scope ?

A - Bean scope forces Spring to produce a new bean instance as per the scope defined.

B - Bean scope defines the accessibility of bean in a java class.

C - Bean scope defines the accessibility of bean in a java package.

D - Bean scope defines the accessibility of bean in a web application.

61. Which of the following aspect implementation spring supports ?

A - XML Schema based aspect implementation

B - @AspectJ based aspect implementation

C - Both of above.

D - None of above.

62. - Core container has AOP as one of its module.

A - True

B - False

63. - Which of the following stands true for spring beans ?

A - Spring beans are managed by the Spring IoC container.

B - Spring beans are instantiated, assembled, and otherwise managed by a Spring IoC container.

C - Spring beans are simple POJOs.

D - All of the above.

64. - How to get object of a service in spring framework ?

A - Using new keyword

B - Using dependency injection

65. What is Target object ?

A - A represents a object in your application where you can plug-in AOP aspect.

B - The object being advised by one or more aspects, this object will always be a proxy object,

also referred to as the advised object.

C - This is used to inject values in objects.

D - This is not invoked during program execution by Spring AOP framework.

66- What is Weaving ?

A - Weaving is the process of injecting values in objects to create an advised object.

B - Weaving is the process of linking aspects with other application types or objects to create an advised object.

C - This is used to inject values in objects.

D - Weaving is used to check object dependencies.

67- What are the different points where weaving can be applied ?

A - Compile time, load time

B - Compile time, run time

C - Run time

D - Compile time, load Time, Run time

68- What are the types of advice ?

A - then, after, after-returning, after-throwing, around

B - When, after, after-returning, around

C - Where, after, after-returning, after-throwing, around

D - Before, after, after-returning, after-throwing, around

69 - How before advice works ?

- A - Run advice before a class loads.
- B - Run advice before a method execution.
- C - Run advice before http response is to be returned.
- D - Run advice before http request is to be processed.

70 - How after-returning advice works ?

- A - Run advice after a class loads only if class loads successfully.
- B - Run advice after a method execution only if method completes successfully.
- C - Run advice after http response is returned only if http response is success.
- D - Run advice after http request is processed with no exception.

71- How after-throwing advice works ?

- A - Run advice after a method execution only if method exits by throwing an exception.
- B - Run advice after a class loads only if class throws exception during load time.
- C - Run advice after http response is returned with error status.
- D - Run advice after http request is processed and an exception occurred.

72. - How around advice works ?

- A - Run advice before and after the advised method is invoked.
- B - Run advice before and after a class is loaded.
- C - Run advice before and after http response is returned.
- D - Run advice before and after http request is processed.

73- Which of the following aspect implementation spring supports ?

- A - XML Schema based aspect implementation
- B - @AspectJ based aspect implementation
- C - Both of above.
- D - None of above.

74 - What are the types of the transaction management Spring supports ?

- A - Programmatic transaction management
- B - Declarative transaction management
- C - Both of above.
- D - None of above.

75- What is Spring MVC framework ?

- A - Spring MVC framework is Model-Value-Class architecture and used to bind model data with values.
- B - The Spring web MVC framework provides model-view-controller architecture and ready components that can be used to develop flexible and loosely coupled web applications.
- C - Spring MVC framework is used for Transaction management for Web Applications.
- D - Spring MVC framework is used for AOP for Web Applications.

76 - What is @Controller annotation ?

- A - The @Controller annotation indicates that a particular class serves the role of a controller.
- B - The @Controller annotation indicates how to control the transaction management.
- C - The @Controller annotation indicates how to control the dependency injection.
- D - The @Controller annotation indicates how to control the aspect programming.

77- What are the ways to access Hibernate by using Spring ?

- A - Inversion of Control with a Hibernate Template and Callback.
- B - Extending HibernateDAOSupport and Applying an AOP Interceptor node.

- C - Both of above.
- D - None of above.

78 - Which ORM Spring supports ?

- A - Hibernate
- B - iBatis
- C - JPA
- D - All of above.
- E - None of above.

79 - Which of the following is part of Data Access layer in Spring framework ?

- A - Beans
- B - Aspects
- C - JMS
- D - Context

80 - How to use ref keyword in beans.

xml ?

- A - Using setter method only.
- B - Using constructor argument only.
- C - Using setter method and constructor argument both.
- D - None of the above.

81 - Core container has AOP as one of its module.

- A - True
- B - False

82. - SpEL is part of core container.

- A - False
- B - True

83. - Which class acts as IoC Container ?

- A - ServletContext

- B - DispatcherServlet
- C - ApplicationContext
- D - None of the above

84.- What stands true for spring framework ?

- A - Spring framework is a light weight framework.
- B - Spring framework is a heavy weight framework.

85.- Expression Language/ SpEL was introduced in which version of spring framework.

- A - 1.0
- B - 2.0
- C - 3.0
- D - 4.0

86- Can we integrate Struts with Spring.

- A - Yes
- B - No

87 - By default a bean is lazily loaded.

- A - True
- B - False

88 - If a bean is scoped to HTTP request, scope is

- A - session
- B - global-session
- C - prototype
- D - request

89 - Thread scoped bean is introduced in which version of spring framework.

- A - 1.0
- B - 2.0
- C - 3.0

D – 4.0

90. - What is the scope of stateless bean ?

A - global-session

B - singleton

C - prototype

D – request

91. - What is the scope of stateful bean ?

A - session

B - global-session

C - prototype

D – request

92 - How to handle shut down of IoC container ?

A - Using shutdownHook

B - Using shutdownHandler

C - Using registerHook

D - Using registerShutdownHook

93 - How bean life cycle can be controlled ?

A - Using init only

B - Using InitializingBean class only

C - Using DisposableBean class only

D - Using All of above

94- What is the scope of bean in portlet context ?

- A - session
- B - global-session
- C - prototype
- D – request

95 - How after advice works ?

- A - Run advice after a method execution regardless of its outcome.
- B - Run advice after a class loads.
- C - Run advice after http response is returned.
- D - Run advice after http request is processed.

96 - Which class is used to map a database row to a java object in spring ?

- A - ResultSet
- B - RowMapper
- C - RowSetMapper
- D – ResultSetMapper

97

A bean must have id attribute in beans configuration file.

- A - True
- B – False

98 - Which of the following class can be used to execute Sql queries in spring ?

- B - JDBCHelper
- A - JdbcTemplate
- C - DBHelper
- D - DBTemplate

99- Which of the following class can be used to call Stored Procedures in spring ?

- A - SPHelper
- B - JdbcTemplateCall

- C - JdbcTemplate
- D – SimpleJdbcCall

100 - What is a DispatcherServlet ?

- A - DispatcherServlet is used for transaction management.
- B - DispatcherServlet is used for AOP.
- C - DispatcherServlet handles all the HTTP requests and responses.
- D - DispatcherServlet is used for Dependency injection.

101. - What is ACID in transactional management ?

- A - Accurate, Controlled, Isolation, Durability
- B - Atomicity, Consistency, Independent, Done
- C - Atomicity, Consistency, Isolation, Durability
- D - Accurate, Controlled, Independent, Done

102. - Where do you define DispatcherServlet ?

- A - In Beans configuration file.
- B - Web.xml file
- C - Meta-inf/dispatcher.xml
- D - Web-inf/ dispatcher.xml

103. - What is true about BeanPostProcessor ?

- A - It is a concrete class.
- B - It is an interface.
- C - It is an abstract class.
- D - None of the above.

104. - What BeanPostProcessor does ?

- A - It processes beans once a bean is initialized.
- B - It defines callback methods that you can implement to provide your own instantiation logic, dependency-resolution logic etc.

C - It processes beans once a bean is loaded.

D - It processes beans once a bean exits.

105.- Can be bean be configured to have an inner bean ?

A - True

B – False

106.- Can we inject value and ref both together in a bean ?

A - True

B – False

107. - Following class can be extended to create custom event in spring.

A - SpringEvent

B - Event

C - ApplicationEvent

D - None of above