

- 1) In Spring AOP, the process of linking aspect with other application types or objects to create an advice object is called -----**Weaving**
- 2) **<list>** tag is used to wire a list of values, allowing duplicates.
- 3) **BeanFactory, ApplicationContext** classes acts as IoC containers in Spring.
- 4) Can you inject null and empty string values in Spring? -----**yes**
- 5) AOP stands for **Aspect Oriented Programming**.
- 6) SpEL is NOT part of core container-----**false**
- 7)Following class can be extended to create custom event in spring.
- A) SpringEvent
 - B)Event
 - C)ApplicationEvent**
 - D)None of above
- 8)Which is the way to provide configuration metadata to spring?
- A) XML Based configuration file.
 - B)Annotation based configuration.
 - C)Java based configuration.
 - d)all of listed**
- 9)Which of the following are modules of Web layer?
- A)Servlet, Web, Portlet, WebSocket**
 - B)WebSocket, Servlet, Web-MVC, Web
 - C)HTML, JSP, WEB, Portlet
 - D)HTML, Servlet, WEB, Portlet

10) How many instances can be created for a global session ----**one**

11) What display the data with help of model? ----- **View**

12) Which of the following is correct assertion about spring?

I.Spring enables developers to develop enterprise-class applications using POJOs.

II.Spring is organized in a modular fashion.

III.Testing an application written with Spring is simple

IV. All of the list

13) 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.

14) What is true about <list> collection configuration elements?

A.This helps in wiring a list of values, allowing duplicates.-----<list>

B.This helps in wiring a list of values but without any duplicates.-----<set>

C.This can be used to inject a collection of name-value pairs where name and value can be of any type.-----<map>

D.This can be used to inject a collection of name-value pairs where the name and value are both Strings.-----<props>

15) Element which can be used to inject a collection of name-value pairs where the name and the value can be of any type.

a)<list>

b)<set>

c)<map>

d)<props>

16)Element which can be used to inject a collection of name-value pairs where the name and the value are both Strings type.

a)<list>

b)<set>

c)<map>

d)<props>

17)What is ContextStartedEvent event?

A) This event is published when the Servlet Context is either initialized or refreshed.

B)This event is published when the HTTP Request is received.

C)This event is published when the ApplicationContext is started using the start() method on the ConfigurableApplicationContext interface.

D)This event is published when the HTTP Response is returned.

18) What is ContextClosedEvent event?

A) This event is published when the Servlet Context is either initialized or refreshed.

B)This event is published when the HTTP Request is received.

C)This event is published when the HTTP Response is returned.

D)This event is published when the ApplicationContext is closed using the close method on the ConfigurableApplicationContext interface.

19) Which of the following is true about @Entity annotation?

A) @Entity annotation marks a class as an entity bean.

B)Class marked with @Entity annotation must have a no-argument constructor that is visible with at least protected scope.

C)Both of the above.

D)None of the above.

20) Which of the following not available in HQL?

- a)Select
- b)Where
- c)Sub**
- d)Having

21)Which of the following is an available aggregate function in HQL?

- a.Aggregate(property name)
- b.Count(property name or *)**
- c.max(property name)**
- d.avg(property name)**

22)Which of the following database is not supported by Hibernate?

- A) DB2/NT
- B)MySQL
- C)FoundationDB**
- D)PostgreSQL

23)Which of the following is true about Hibernate?

- A) Hibernate is an Object-Relational Mapping(ORM) solution for JAVA**
- B)Hibernate is an Object-Relational Mapping(ORM) solution for .NET
- C)Both of the above.
- D)None of the above.

24)ORM stands for Object-Relational Mapping (ORM) is a programming technique for converting data between relational databases.-----**True**

25)What is the difference between save() and persist() methods of session object?

A) There is no difference.

B)save saves the object and returns status whereas persist stores status in different variable.

C)save saves the object and returns the id of the instance whereas persist do not return anything after saving the instance.

D)None of the above.

26) What is required to write a basic spring program?

jdk,ide,maven,all the above

27)JDBC, ORM, OXM, JMS, Transactions are the modules of Data Access/ Integration layer.-----**True**

28)Spring framework is a light weight framework.-----**TRUE**

29) Singleton is the default scope of any spring bean. -----**TRUE**

30)Analyze the below code snippet:

```
<bean class="com.spring.service.MyServiceImpl">
```

```
<property name="repository" ref="jpaDao"/>
```

```
</bean>
```

```
<bean class="com.spring.repository.JpaDao"/>
```

Which of the following statements is valid?

I. The "id" attribute must be declared for the bean "MyServiceImpl" because it is mandatory attribute.

II. In the second bean of type "com.spring.repository.JpaDao" the "id" attribute must be specified with name "jpaDao".

Select One

a. Both I and II are correct

b. II only

c. I only

d. Both I and II are incorrect

31) Which of the following parses in XML based on expression and its used extensively in conjugation with xstl?

- a) JDOM parser
- b) SAX parser
- c) STAX parser
- d) Xpath parser**

32) What is true about BeanFactory, ApplicationContext?

BeanFactory is basic and ApplicationContext is advanced

33) Which are the correct implementation classes of ApplicationContext?

- A. FileSystemXmlApplicationContext, ClassPathXmlApplicationContext, WebXmlApplicationContext**
- B. FileSystemApplicationContext, ClassPathApplicationContext, WebApplicationContext
- C. AdvancedApplicationContext, FileApplicationContext
- D. FileSystemApplicationContext, ClassPathApplicationContext

34) org.springframework.web.servlet.DispatcherServlet is the configuration in xml file for dispatcherServlet.

35) The central artifact in spring javaConfig is the @Configuration annotated class?-----**True**

36) Maven is a project management and comprehension tool-----**True**

37) What is session scope?

- A) This scopes a bean definition to an HTTP session.**
- B) This scopes the bean definition to Spring IoC container.
- C) This scopes the bean definition to HTTP request.
- D) This scopes the bean definition to HTTP Application/ Global session

38) What of the following is not correct in live environment?

- a. Constuctor and properties autowiring in the same bean are not compatible
- b. A bean should have a default or a no-args constructor
- c. The <constructor-arg> tag could take type, name and index to reduce ambiguity

d. All of the above

39) which is not core component of hibernate?

a.transaction

b.criteria

c.provider

d.query

40) ServletWrappingController-Wraps an existing servlet which is managed completely by the spring environment.-----**True**

42)Validations for normal employee class

I.Name cant be empty

I.Id cant be empty

III.Id cant be less than 1

iv.all the above

44)Different types of run advice "before" and "after" the advised method is invoked. Which of the following is the correct option with respect to advice?

a.After returning

b.None

c.After throwing

d.around

45)HQL- easily stores, update and retrieve from the database----- **True**

46) Which of the following is Hibernate?

a.Lightweight

b.Open Source

c.ORM

d.All of the listed

48) When we work with an object oriented system, there is mismatch between the object model and the relational database State True or False

a) TRUE

b) FALSE

49) Spring mvc is a model-view-controller.-----**True**

50) Form fields are validated using user defined validations class by implementing validation interface State True or False.-----**True**

51) Spring does not separate three modules like presentation layer, business layer and data access layer State True or False.-----**False**

52) Pick odd one out in the following annotations (invalid annotations)

I.@PathVariable **II.@responsevalid**

III.@Controller IV.@requestMapping

53) Length returns number of rows in a column for only string type.-----**True**

54) Which level cache implements a cache for query result sets

a.Third level cache

b.Second level cache

c.First level cache

d. Fourth level cache

57) What is the function of clean maven lifecycle command ?

cleans artifacts in the earlier build

60) Which of the following is a one to one relationship

a) <many-to-many>

b) <many-to-one>

c) None of the list

d) <one-to-many>

61) Which of the following is a many to one relationship

a) many-to-one

b) <many-to-one>

c) None of the list

d) <Manyone>

62) The same XSD of BeanFactory can be used for View resolver interface?

State True or False

a) TRUE

b) FALSE

63) Testing an application written with Spring is complex because environment-dependent code is moved into this framework.-----**false**

64)What is ContextStoppedEvent event?

A) This event is published when the Servlet Context is either initialized or refreshed.

B)This event is published when the ApplicationContext is stopped using the stop() method on the ConfigurableApplicationContext interface.

C)This event is published when the HTTP Request is received.

D)This event is published when the HTTP Response is returned.

65)XsltViewResolver-supports XsltView by resolving the view name of which of the following options

a) all of the listed options

b)VelocityView and its subclasses

c)URL of xslt

d)view name of the URL of the report file.

66) Spring MVC provides predefined templates for JDBC, Hibernate and JPA.-----**True**

67) ApplicationContext implements which of the following interface that is used to obtain localized messages, with the actual implementation being pluggable

I. MessageSource

II. RequestMapping

a. only I

b.only II

c. Neither I or II

d. Both I and II

68) Which of the following are the best practices for writing spring XML Configurations?

a.Using consistent naming conventions

b. Rarely use classpath

c.Mentioning version numbers in schema references

d.reuse bean definitions as much as possible

69) To validate the form fields you need to have a separate UserValidator class that implements the validator interface, Override the validate() method perform all the validations.-----**True**

70) Which of the listed options are TRUE for Bean configuration inheritance?

- I. In spring, Inheritance is supported in bean configuration to share common values, properties or configurations
- II. A child bean or inherited bean can inherit its parent bean configurations, properties and some attributes
- III. The parent bean allow to override the inherited values

a.I, II, and III

b.I and II

c.II and III

d.I and III

71) which of the following options about Auto wiring in spring are correct?

- I. The Auto wiring in spring framework can be performed by configuring in xml and spring Auto-Wiring with Annotation `@Autowired`
- II. Auto-wiring beans with xml configuration: In Spring framework, you can wire beans automatically with auto wiring feature
- III. To enable auto-wiring just define the "autowire" attribute in `<bean>` tag.

a.I, II, and III

b.I and III

c.I and II

d.II and III

72) XML Mapping file offers which of the following?

- a.Readable Metadata
- b.Surrogate key generation strategy
- c.Coleccion metadata
- d.all the listed options**
- e.Column/Table Mapping

73) Which of the following explains about addClass function in the listed options(doubt)

- I. This function translates a Java class name into file name
- II. This translated file name is then loaded as an input stream from the java class loader
- III. This addClass function is important if you want efficient usage of classes in your code

a. I, II, and III

- b. I and III
- c. I and II
- d. II and III

74) The application is designed around an object model. The SQL code is generated at build time and the associations between objects are supported by the persistent mechanism, and queries are specified using an object oriented expression language. This best suited for medium-sized applications with some complex transactions. Used when the mapping exceeds 25 different database products at a time.

Which of the following is this called as?

- a. Application Object Mapping
- b. Expression object mapping
- c. Medium Object Mapping**
- d. Object Mapping

75) Which of the following is not the best practice?

a. Provide exit controller in the web

- b. Create a controller class
- c. start server & deploy the project
- d. Define the bean in the xml file

76) What are the modules of spring web flow?

a. Spring-faces

- b. Spring-bundling
- c. Spring-container**

d.Spring-webflow

77) Bean post processor is a concrete class-----**false**

78) The Spring MVC pattern does not separate the different aspects of the application into input logic, business logic, and UI logic.-----**false**

79) Constructors in a class can be?

- a. may be defined as private
- b. Contains same name as class
- c. used to create objects
- d. all the above**

80) Given the Spring configuration file, which are the correct statements?

```
<bean class="com.spring.service.BankServiceImpl"
```

```
p:bankName="NationalBank">
```

```
</bean>
```

- a) The p namespace has to be declared**
- b) Bean id is bankServiceImpl
- c) The BankServiceImpl references a NationalBank bean
- d) NationalBank is a scalar value**

81) Which is correct?

- a. Hibernate is an object oriented query language
- b. It is database independent
- c. it supports pagination
- d. HQL statements will be converted to SQL or other language the database supports
- e. all the above**

82) Using the Spring AOP framework, what are the joinpoint methods of the following pointcut expressions?

```
execution(public * *(..))
```

- a) **The execution of all public method**
- b) The execution of all public method returning a value
- c) The execution of all public method having at least one parameter
- d) The execution of all public method in class belonging to the default java package

83) What is the transaction behavior of the PROPAGATION_REQUIRES_NEW model? Select a unique answer.

- a) If a transaction exists, the current method should run within this transaction. Otherwise, it should start a new transaction and run within its own transaction.
- b) If a transaction is in progress, the current method should run within the nested transaction of the existing transaction. Otherwise, a new transaction has to be started and run within its own transaction.
- c) **The current method must start a new transaction and run within its own transaction. If there is an existing transaction in progress, it is suspended.**
- d) None of the above

84) Types of autoproxying?

- a. **BeanNameAutoProxyCreator**
- b. **DefaultAdvisorAutoProxyCreator**
- c. Metadata autoproxying
- d. WebApplication context

85) Which scope is a single bean definition to have any number of object instances ? -----**prototype**

86) Which annotation is used in setter? which type of annotation applies to bean property setter methods select one

- a)@Requires
- b)@Resource
- c)**@Required**
- d)@Requiring

87) Model is used to encapsulate the response data-----**True**

88) What is a view resolver?

- a) class
- b) interface**
- c) object
- d) argument

89) Cache enables the database to hit as much as possible for better performance in critical applications.-----**True**

90) View Resolver provides a mapping between view names and actual views.-----**True**

91) Which one interpret user input and transform it into a model that is represented to the user by the view.

- a) controller**
- b) dispatcher servlet
- c) model
- d) browser

92) Assuming @Transactional annotation support is enabled and the transferMoney method is called through a Spring AOP proxy, what is the behavior of the following code sample?

```
@Transactional(propagation=Propagation.REQUIRED)
```

```
public void transferMoney(Account src, Account target, double amount) {
```

```
add(src, -amount);
```

```
add(src, amount);
```

```
}
```

```
@Transactional(propagation=Propagation.REQUIRES_NEW)
```

```
public void add(Account account, Double amount) {
```

```
// IMPLEMENTATION
```

```
}
```

- a) The add() method executes code in a new transaction
- b) The add() method uses the transaction of the transferMoney() method**
- c) When calling the add() method, an exception is thrown

d) Other behavior

93) Application contexts can publish events to beans that are registered as listeners.-----**true**

94) Which is not used as java annotation

- a) @component
- b) @bean
- c) @configuration
- d) none**

95) Hibernate supports query cache-----**true**

96) What are the mapping associations used in hibernate?

- a. One-to-One Association**
- b. Many-to-One Association
- c. One-to-Many Association
- d. Many-to-Many Association**

97) What are the different fetching strategies in hibernate?

- a) Join Fetching**
- b) Batch Fetching**
- c) Select Fetching**
- d) Sub-select Fetching**

98) Hibernate helps in mapping of java objects with database tables -----**true**

99) Which of the following are mandatory rules to create validation for a normal employee table?

- a.The "empNum" cant be empty
- b."Name" cant be empty
- c.The "empNum" cant be less than 1
- d.All of the option**

100) Which of the following allows as to add a new method or attributes to existing classes?

a.Introduction

- b.Proxy
- c.Weaving
- d.Auto call

111. Length attribute of @column annotation permits the size of the column used to map a value particularly for a string value.-----**true**

112. Which of the following is true regarding prototype

- a. **scope is a single bean definition to have any number of object instances**
- b. it is the default scope in standard web applications
- c. **the instances will be created for each bean dependency**

113.which mapping is given in hibernate in common?

- a) **object**
- b) **relational**
- c) class
- d) column

114.In which level, sql query is integrated in HQL?

- a) class level
- b) low level
- c) high level
- d) **object level**

115.In which way, the properties of one bean is used by number of beans?

- a) **inheritance**
- b) dependency injection
- c) through child bean

116.In spring MVC each tag provides support to the set of attributes of its corresponding HTML tag counterpart making the tags familiar & intuitive to use-----**True**

117.We can use index and type attribute together-----**true**

118.Which of the following is true about JDBC?

- a.JDBC APIs enables java programs to execute SQL statements and interact with any SQL Complaint database
- b.JDBC stands for Java Database Connectivity

c.it provides set of java API for accessing the relational databases from java program

d.All the listed option

119.Which of the listed statement are correct for spring Bean

- a) **Spring container creates new instance of bean for each and every request for that bean**
- b) **Prototype scoped bean is served by creating new instance of bean for each and every bean dependency**
- c) After instantiating bean and submitting it to client spring container will maintain the record
- d) **Prototype scope is spring standard scope and can be used in standalone as well as web application of spring.**

120.Which is the query language that embodies a very powerful and flexible mechanism to query, store, update and retrieve

objects from a database?

- a.PLSQL
- b.RDBMS
- c.SQL
- d.HQL**

121.What is spring MVC framework?

- a.spring MVC framework is used for Transaction management for web application
- b.spring MVC framework is Model-value-class architecture and used to bind model data
- c.spring MVC framework is used for AOP for web application
- d.spring web MVC framework provides model-view-controller architecture and ready components that can be used to develop flexible and loosely coupled web applications**

122.When you need to upload a large number of records into your database using Hibernate, you can use batch processing.-----**true**

123.Implementation of viewResolver accets a configuration file written in XML with the same DTD as spring XML bean factories.-----**true**

124.For a fast Development, the dependency injection feature of spring Framework &support to various Frameworks makes the easy development of javaEE application.-----**true**

125.In hibernate implement cache for a query ,if the result sets can integrate closely,which level of the cache can be implemented?

- a.first level cache
- b.second level cache**
- c.third level cache
- d.Fourth level cache

126.In Spring MVC which of the following is the front controller class that initializes the context based on the spring beans configuration?

- a.org.springframework.web.servlet.DispatcherServlet**
- b.org.springframework.web.context.DispatcherServlet
- c.org.springframework.web.servlet
- d.org.springframework.web.context.ApplicationContext

127.Which of the following statements are correct?

- a.Bean Factory and ApplicationContext are basic container only
- b.Bean Factory is basic container and ApplicationContext is advanced container**
- c.Bean Factory and ApplicationContext are advanced container
- d.Bean Factory is advanced container and ApplicationContext is basic container

128.In spring bean configuration bean attribute called 'scope' defines what kind of object has to be created and returned. What returns a new bean instance each time when required?

- a.Prototype**
- b.Session
- c.Singleton
- d.Global session

129. Which of the following is true about Hibernate?

- A) Hibernate takes care of mapping Java classes to database tables using XML files and without writing any line of code.
- B) Hibernate provides simple APIs for storing and retrieving Java objects directly to and from the database.
- C) Hibernate abstracts away the unfamiliar SQL types and provide us to work around familiar Java Objects.
- D) All of the above.**

130. Spring MVC provides a JSP tag library(Spring form) for making it easier to bind form elements to model data.-----**True**

131. Which of the following statement is INCORRECT by extending ViewResolver and ChainingViewResolver?

- a. programmers can have custom view resolvers
- b. There are lot of view resolvers available in Spring framework
- c. Spring MVC view resolvers help the Dispatcher Servlet in identifying the views which has to be rendered in response for a request.
- d. none**

132. Spring MVC provides better way to separate which of the following?

- a. Presentation
- b. Tools
- c. Data Access
- d. Business Logic(not sure)**

133. It is difficult to inject the dependency by constructor. -----**true**

134. The Model-View-Controller(MVC) is an architectural pattern that does not separate an application into three main logical components: the model, the view and the controller.-----**false**

135. How many layers are there in Hibernate architecture

a)3

b)4

c)5

d)2

136. Which tool helps to generate the mapping document Though many Hibernate users choose to write the XML by hand

select one

a)oldgen

b)younggen

c)Middlegen

d) Mediumgen

137. Java based configuration option disables you to write most of your Spring configuration without XML but with the help of few Java-based annotations -----**False**

138. What types of views supported by spring MVC for different presentation technologies

select one or more

a)JSP

b)HTML

c)velocity templates

d) all

139. Spring is a heavy weight framework-----**False**

140. A very powerful and high performance querying language used to Query, retrieve, store data in DB is

select one

- a)PLSQL
- b)HQL**
- c)SQL
- d)RDBMS

141. Which best describes the propagation attribute REQUIRED?

- a. Create a new transaction, suspend the current transaction if one exists.
- b. Execute non-transactionally, suspend the current transaction if one exists.
- c. Supports a current transaction, throw an exception if none exists
- d. Support a current transaction, create a new one if none exists.**

142. Which best describes the propagation attribute NON_SUPPORTED?

- a. Create a new transaction, suspend the current transaction if one exists.
- b. Execute non-transactionally, suspend the current transaction if one exists.**
- c. Supports a current transaction, throw an exception if none exists.
- d. Support a current transaction, create a new one if none exists.

143. Which best describes the propagation attribute MANDATORY?

- a. Create a new transaction, suspend the current transaction if one exists.
- b. Execute non-transactionally, suspend the current transaction if one exists.
- c. Supports a current transaction, throw an exception if none exists.**
- d. Support a current transaction, create a new one if none exists.

144. Which best describes the propagation attribute REQUIRES_NEW?

- a. Create a new transaction, suspend the current transaction if one exists.**
- b. Execute non-transactionally, suspend the current transaction if one exists.
- c. Supports a current transaction, throw an exception if none exists.
- d. Support a current transaction, create a new one if none exists.

145. Can you instantiate a static inner class in Spring?

- a. No, static classes are not supported
- b. Yes, they are instantiated by default with the class.**

146. An application server is required for spring's transaction mechanism to run.

- a. TRUE
- b. FALSE**

147. What are the types of injection supported by Spring?

- a. Constructor Injection only.
- b. Constructor Injection and Setter Injection**
- c. Constructor Injection, Setter Injection and Interface Injection
- d. Constructor Injection, Setter Injection before 2.0 and Interface Injection with 2.0 and above version

148. @Inject annotation supports "required" attribute.

- a) TRUE
- b) FALSE**

149. Which event is published when context is initialized?

- a) ContextStartedEvent.
- b) ContextRefreshedEvent**
- c) ContextInitializedEvent
- d) ContextReadyEvent

150. Which event is published when context is refreshed?

- a. ContextStartedEvent
- b. ContextInitializedEvent
- c. ContextReadyEvent
- d. ContextRefreshedEvent**

151. 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

152. 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. **None of the above**

153. 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

154. WebApplicationContext has more scopes like request, session, globalSession to the standard Application context (which only provides Singleton and Prototype scopes)-----**true**

155. All of Spring's various Controller inherit from AbstractController?-----**true**

156. You can write your own controller by using handleRequestInternal(HttpServletRequest, HttpServletResponse) method from abstract controller and a ModelAndView object.-----**true**

157. Which of the following controller inspects the URL and retrieves the filename of the file request and uses that as a viewname ?For example, the filename of http://www.springframework.org/welcome.html request is welcome.

- a. **UrlFilenameViewController**
- b. MultiActionMultiActionController
- c. CommandController
- d. AbstractController

158. The available prefixes for ClassPathXmlApplicationContext look up are:-

classpath:

file:

http:

https:

159. Spring event mechanism is based on the standard:-

- a. **Observer Design Pattern**
- b. Factory Design Pattern
- c. Mediator Design Pattern

160. What kind of servers can support Spring Transaction?

- a. Only Application servers
- b. Only Application servers which support J2EE specification
- c. **Spring's transactional services are supported on web servers also**

161. In Spring Framework's declarative transaction implementation, is it sufficient to annotate to classes with the @Transactional annotation? -----**NO**

162. What is dependency injection?

- a)A design pattern where dependent objects are defined in an xml for easy maintainability.
- b)This is a design pattern whereby dependent objects are passed into an object from the outside at the time application is initialized.**
- c)A unique feature of spring which allows object to be injected at the time of compilation.

163. Given following controller :-

```
@RequestMapping("/basket")
```

```
@Controller
```

```
public class Shopping {
```

```
    @RequestMapping("/{id}")
```

```

public String doCheckOut(@PathVariable Date time) {
    return "home";
}
}

```

Is declaration of Shopping#doCheckOut method correct?-----**TRUE**

164. If you were using Join Points, Pointcuts & Advice what would you be using?

- a)Bean Contatiner
- b)JPA
- c)EJB
- d)**AOP**

165. Spring 3.0 does not support for multipart form.-----**False**

166. Which of the following view technologies are supported by Spring?

- a. JSTL/JSP
- b. Ms Excel
- c. Adobe PDF
- d. **All of the above.**

167. Spring 3.0 provides the PropertyEditor for performing thread-safe type conversion. This allows any Type to be converted to any other Type.-----**FALSE**

168. For a given web.xml configuration:

```

<web-app version="2.5">
<servlet>
<servlet-name>dispatcher</servlet-name>
<servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
<load-on-startup>1</load-on-startup>
</servlet>
<servlet-mapping>
<servlet-name>dispatcher</servlet-name>

```

<url-pattern>/*</url-pattern>

</servlet-mapping>

</web-app>

Which path should have file that contains XML configuration metadata for ApplicationContext of given DispatcherServlet?

/WEB-INF/application-context.xml

/dispatcher-servlet.xml

/WEB-INF/dispatcher-servlet.xml

169. Suppose I have an aspect:

@Before("execution(* method*())")

and the following class:

```
public class MyClass() {  
    public void method1() {  
        method2();  
    }  
    public void method2() {  
    }  
}
```

If I call, myClass.method1(), from another class, which methods does the advice run against?

- a. **method1**
- b. method2
- c. neither
- d. both

170. The following methods :-

queryForInt(args)

queryForList(args)

getJdbcOperations()

getNamedParameterJdbcOperations()

are all present in which of the following class?

- a. **SimpleJdbcTemplate**
- b. JdbcTemplate
- c. NamedParameterJdbcTemplate
- d. None of the above

171. The dynamic languages currently supported by Spring are

- a. Groovy
- b. JRuby
- c. BeanShell
- d. **All the above**

172. JMS stands for-

- a. **Java Message Service**
- b. Java Mechanism Service
- c. Java Message System
- d. Java MultiThreaded System

173. Which of the following tag is used to enable Aspect using XML configuration?

- a) **<aop:aspectj-autoproxy/>**
- b) <aop:aspectj-component/>
- c) <aop:aspectj/>
- d) <aop:aspectj-autoproxy-component-scan/>

174. Programatic transaction management is done using:-

- a) **TransactionTemplate**
- b) **PlatformTransactionManager**
- c) @TransactionManager
- d) IntegratedTranaction

175. Which of the following are valid return types, or values, from a controller implementation?

- a) null

- b) A String view name
- c) void
- d) All of the above**

176. Which of the following are JSR - 250 annotation/s?

- a) **@PreConstruct**
- b) **@PreDestroy**
- c) **@Resource**
- d) @PostConstruct
- e) @Autowired
- f) @Controller

177. In Spring's form tag library which of the following tags are valid?

- a) input and inputs
- b) checkbox and checkboxes**
- c) radiobutton and radiobuttons**
- d) redirect

Solution

checkbox and checkboxes are valid spring tags.

radiobutton and radiobuttons are valid spring tags.

input is valid spring tag but inputs is not a valid spring tag.

178. If you want to provide the MessageSource functionality to application, providing access to messages in i18n-style in your application. Which one should be used?

- a) ApplicationContext
- b) Property File**
- c) Servlet Context

179. Can dependency injection be lazy initialized?

- a) YES
- b) NO

Solution

Using lazy-init="true" in spring configuration file on the bean, it can be instantiated only when needed.

180. What is second level cache in hibernate?

A) The second-level cache is the SessionFactory based cache and is mainly responsible for caching objects across sessions.

B)The second-level cache is the Session based cache.

C)Both of the above.

D)None of the above.

181.What is the type of file used for spring configuration?

Ans:

- XML based configuration file.
- Annotation-based configuration
- Java-based configuration

182. What is the security annotation used in spring? (@autowire, @transcible ,.....)

Ans :@PreAuthorize and @PostAuthorize

183. What are the types of editors used in spring framework?

Ans:

- PropertyEditor
- URLEditor
- ClassEditor
- CustomDateEditor
- FileEditor
- LocaleEditor
- StringArrayPropertyEditor
- StringTrimmerEditor

184. What is the use of ‘after return advice’?

Ans : Advice that is executed after the normal completion of a joinpoint is called the “after returning advice”.

185. What are the things mapped in an XML? (Data type, value ,....)

186. Describe Global and Local transactions in Spring.

Ans: Global transactions help to work with multiple transactional resources like relational database and message queue.

Global transactions are managed through JTA and JNDI. Local transactions are resource-specific like JDBC connection.

Local Transactions can work with multiple transactional resources.

188. What is the role of TransactionDefinition interface?

a. Isolation

b. Propagation

c. Timeout

d. Read-only status

189. How can we roll back a declarative transaction?

We can use rollback-for and no-rollback-for attributes with transactional definition.

190. How many types of isolation are there?

a. ISOLATION_DEFAULT: default isolation.

b. ISOLATION_READ_COMMITTED: dirty reads are prevented, non-repeatable and phantom reads are allowed.

c. ISOLATION_READ_UNCOMMITTED : dirty reads are allowed, non-repeatable and phantom reads are allowed.

d. ISOLATION_REPEATABLE_READ: dirty reads and non-repeatable reads are prevented but phantom reads are allowed.

e. ISOLATION_SERIALIZABLE : dirty , non- repeatable reads and phantom reads are prevented.

191. How many types of Propagation are there?

a. PROPAGATION_MANDATORY : supports current transaction and throws exception if no transaction available.

b. PROPAGATION_NESTED : runs with nested transaction

c. PROPAGATION_NEVER : does not run with current transaction and throws exception if current transaction exists.

- d. PROPAGATION_NOT_SUPPORTED : runs non -transactionally and does not support current transaction.
- e. PROPAGATION_REQUIRED : runs with current transaction and create one if does not exist.
- f. PROPAGATION_REQUIRES_NEW : creates new transaction and suspends if exists any.
- g. PROPAGATION_SUPPORTS: runs current transaction and runs non -transactionally

192.Name attribute of @Column annotation permits the name of the column to be explicitly specified.

a) **true**

b) false

193. which of the following Allows you to add new methods or attributes to existing classes?

a.Advice

b.Join point

c.Aspect

d.Pointcut

e.Target object

f.Weaving

g.Introduction

194. Which of the statement is not correct?

A) Core and beans modules provide the fundamental parts of the framework, including Dependency Injection feature.

B)The SpEL module provides a powerful Expression Language for querying and manipulating an object graph at runtime.

C)Aspects module provides integration with AspectJ.

D)None of the above.

195. - SpEL is part of core container.

A) False

B)True

196 - Which are the modules of Web layer?

- A) WebSocket, Servlet, Web, Portlet**
- B)WebSocket, Servlet, Web-MVC, Web
- C)HTML, JSP, WEB, Portlet
- D)HTML, Servlet, WEB, Portlet.

197. SpEX is NOT one of its module Core container.

- A) True**
- B – False

198. Which of the statement is correct?

- A) The JDBC module provides a JDBC-abstraction layer that removes the need to do tedious JDBC related coding.
- B)The ORM module provides integration layers for popular object-relational mapping APIs, including JPA, JDO, Hibernate, and iBatis.
- C)The Java Messaging Service JMS module contains features for producing and consuming messages.
- D)All of the above.**

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

- a) True**
- b) False

200. Beans, Core, Context, SpEL are the modules of core container.

- a) true**
- b) false

201. How can you inject Java Collection in Spring??

- A) Using list, set, map or props tag.**
- B)Using lit, set, map or collection tag.
- C)Using list, set, props or collection tag.
- D)Using list, collection, map or props tag.

202. 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.

203. Run advice before and after the advised method is invoked.

ans. around advice

204. Length attribute of @Column annotation permits the size of the column used to map a value particularly for a String value.

A) false

B)true

205. Needs to be implemented by objects that can resolve views by name.

ANS : ViewResolver

206. The @Transactional annotation allows u to define transactions programmatically.

Ans: FALSE

207. 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.

208. What are the benefits of Spring Framework's transaction management?

a.It Provides a consistent programming model across different transaction APIs such as JTA, JDBC, Hibernate, JPA, and JDO.

b.It Supports declarative transaction management.

c.It Provides a simpler API for programmatic transaction management than a number of complex transaction APIs such as JTA.

d.All the listed

209. Given the following Spring configuration file, what is the correct answer:

```
<bean class="com.spring.service.MyServiceImpl">
```

```
<property name="repository" ref="jpaDao"/>
```

```
</bean>
```

```
<bean class="com.spring.repository.JpaDao"/>
```

- i. The first declared bean MyServiceImpl is missing an id must be named myService
- ii. The second declared bean JpaDao is missing an id must be named jpaDao**
- iii. Answers 1 and 2 are both rights
- iv. Answers 1 and 2 are both wrong

220. which of the following are the concerns which are needed in almost every module of an application

a)logging

b)security

c)data transfer

221. Hibernate is the open object relational mapping tool for java.

a>true

b>false

222. which of the following can be values of beans?

- a. Bean
- b. All**
- c. Collection(set,list,props,map)
- d. Direct values
- e. Compound property

223. Which of the following is not a type of mapping

- a.Instance mapping**
- b.Component mapping
- c.Association mapping
- d.Class mapping

224. Which of the following is true about <property> element?

- A) The <property> element is used to map a Java class property to a column in the database table.
- B)The name attribute of the element refers to the property in the class.
- C)The column attribute of the element refers to the column in the database table.
- D)All of the above.**

225. In Spring MVC which of the following is the front controller class that initializes the context based on the spring beans configuration?

- a)org.springframework.web.servlet.DispatcherServlet**
- b)org.springframework.web.context.DispatcherServlet
- c)org.springframework.web.servlet
- d)org.springframework.web.context.ApplicationContext

226. The central artefact in spring javaConfig is the @Configuratuion annotated class?State True or False

- a) TRUE**
- b) FALSE

227. Which of the following situation represents many-to-many relationship?

- A) An employee can have multiple certificates and same certificate can be conferred to many employees.**
- B)An employee can have multiple certificates.
- C)A certificate can be conferred to many employees.
- D)All of the above.

228. Session----This scopes a bean definition to an HTTP session only.

229. Which of the following element maps java.util.Map property in hibernate?

- A) <Set>
- B)<List>
- C)<Bag>
- D)<Map>**

230. Is second level caching mandatory in hibernate?

- A) true
- B>false**

231. In spring MVC each tag provides support to the set of attributes of its corresponding HTML tag counterpart making the tags familiar & intuitive to use. State true or False.

- a) True**
- b) false

232. Which of the following element maps java.util.Collection property in hibernate?

- A) <set>
- B)<list>
- C)<bag>**
- D)<map>

233. Which of the following is true about HQL?

- A) Hibernate Query Language (HQL) is an object-oriented query language.
- B)Instead of operating on tables and columns, HQL works with persistent objects and their properties.
- C)Both of the above.**

D)None of the above.

234. Length returns number of rows in a column for only string type

a). **TRUE**

b). FALSE

235. The view interface inhibits the preparation of request and hands the request over to one of the view technologies in spring. State true or false

a)**true**

b>false

236. The data required for the request is in which part of spring MVC component?

a)model

b)view

c)controller

d)all

237. <id name="deptId" type="string">

<column name="columnid" length="30"/>

</generator/></id> [/xml]

<id name="deptId" type="string">

<column name="columnid" length="30"/>

</generator/></id> [/xml]

The above is an example of creating which key?

a.DB key

b.Unique key

c.Secondary key

d.Primary key

238. Which of the following is true about <class> element?

- A) The <class> elements are used to define specific mappings from a Java classes to the database tables.
- B) The Java class name is specified using the name attribute of the class element.
- C) The database table name is specified using the table attribute of the class element.
- D) All of the above.**

239. Which of the following is a many to one relationship

- a) many-to-one
- b) <many-to-one>**
- c) None of the list
- d) <Anyone>

240. To use Hibernate for multiple databases, Configure multiple sessionFactory instances. State True or False.

- a) True**
- b) False

241. Which of the following are CORRECT in SQL queries in Hibernate.

- I. SQL queries may contain named and positioned parameters, just like Hibernate queries
- II. You may express a query in SQL, using createSQLQuery()
- III. Hibernate take care of the mapping from result sets to objects
- IV. You may call session.connection() and use the JDBC Connection at any time.

select one

- a. I, II, and III
- b. I, II, and IV
- c. I, III, and IV
- d. I, II, III, and IV**

242. Which scope is a single bean definition to have any number of object instances

Prototype

243. @RequestMapping annotation is used to map a URL either an entire class or to particular handler method

- a) **True** b) False

244. Beans,Core, Context,spEL are the components in Core container

- b) **True** b) False

245. which of the following method returns the root element of the document in DOM parsing?

- a) Node.getFirstChild
- b) Node.getLastChild
- c) **Document.getDocumentElement**
- d) Node.getRoot

246. Which of the following is true about INSERT CLAUSE in HQL?

A) HQL supports INSERT INTO clause only where records can be inserted from one object to another object.

B)HQL supports INSERT INTO clause without any restriction.

C)Both of the above.

D)None of the above.

247. Element which can be used to inject a collection of name-value pairs where the name and the value are both Strings type.

- a)<list>
- b)<set>
- c)<map>
- d)<props>

248. Which type of annotation applies to bean property setter methods?

- a)@Requires
- b)@Resource

c)@Required

d)@Requiring

249. Which of the following tools/frameworks provides integration with Hibernate?

A) XDoclet Spring

B)J2EE

C)Maven

D)All of the above.

250. Which of the following is true about <id> element?

A) The <id> element maps the unique ID attribute in class to the primary key of the database table.

B)The name attribute of the id element refers to the property in the class.

C)The column attribute of the id element refers to the column in the database table.

D)All of the above.

251. what are the extension interface are there in hibernate?

a)ConnectionProvider interface

b)ProxyFactory interface

c)Transaction interface

d)Cache interface

e)all

252. which of the following is Hibernate?

a.Lightweight

b.Open Source

c.ORM

d.All of the listed

253. In how many ways, objects can be fetched from database in hibernate?

Hibernate provides following four ways to fetch objects from database:

a. Using HQL

- b. Using identifier**
- c. Using Criteria API**
- d. Using Standard SQL**

254. You would need one session factory object per database using a separate config file.

- a) TRUE**
- b) FALSE

255. IOC container is responsible to:

- create the instance
- configure the instance, and
- assemble the dependencies

256. Which elements not supported by hql?

- A.sub**
- B.where
- C.having
- D.select

257. What does hibernate batch update and delete do?

- a.doesnt effect any versioning columns(update only);
- b.can only be against a single object type;
- c.understands the instance;
- d.data is modified directly in db.
- e. all of above**

258. does sessionLocaleResolver interceptor detects if a special parameter is present in current Http req?

No

259. Which of the following are true about 'clean' maven life cycle

- a.used to build the application

- b.generates site documentaion for the project
- c.cleans up artefacts created by prior builds**
- d.none

260.J2EE integration with hibernate is very difficult.

- a) TRUE
- b) FALSE**

261. Which clause allows you to narrow the list of instances returned?

- a) Aggregate function
- b) Where clause**
- c) Select clause
- d) joins

262. Constructor injection is difficult to inject. State True or False (doubt)

- a) TRUE**
- b) FALSE

263. Which of the following great future if you can manage in long term?

- A) constructor injection**
- B) schema mapping
- C) classpath prefix
- D) autowiring

264. Session.beginTransaction method begins a unit of work and returns the associated Transaction object.

- A) true**
- B>false

265. How many bean scopes are specified in singleton by default?

a.6

b.7

c.5

d.none

266. Hibernate inhibits you to express queries in its own portable SQL extension (HQL)as well as in native SQL ,or with an object oriented criteria

a>true

b)False

267. Tags generated by form tag lib are compliant with xhtml-1.0 strict specification and attendant dtd.

a) True

b) false

268. Archetype is a maven plugin whose task is to create a project structure as per its template

c) True

d) false

269. how do u provide configuration metadata to spring container?

a.xml based config fle

b.annotation based config

c.java based config

270. Spring applications is tightly coupled because of dependency injection

a)True

b)False

271. Named queries are created via which level of annotations on entities?

a.all-level

b.high-level

c.low

d.class level

272. The SessionFactory is heavyweight object.

A) false

B) true

273. What is the difference between get() and load() methods of session object?

A) get() returns null if no data is present where as load throws ObjectNotFoundException exception in such case.

B)get() always hits the database whereas load() method doesn't hit the database.

C)get() returns actual object whereas load() returns proxy object.

D)All of the above.

274. The test module supports the testing of spring components with junit for testing

a) True

b) false

275. In controller which is responsible for rendering the page in spring mvc(not sure)

a.browser

b.http

c.database

d.application

276. XML Schema-based configuration introduced in **Spring 2.0**

277. Spring can organize which type of objects?

a.application layer

b.database layer

c.network

d.browser

278. Which is not a module in spring framework? (ORM/DAO/MVC/none)----**none**

279. Hibernate is an open ORM tool for java(t/f)-----**true**

280. Which element of hbm.xml automatically generate the primary key values?

A) id

B)generator

C)primaryKey

D)None of the above.

281.The Spring MVC pattern does not separate the different aspects of the application into input logic, business logic, and UI logic.

a) true

b) false

282.use of addclass function

a) it is used to convert java class name into file name

b) with the file name, input stream, reader will be processed

c) using add class, other classes will be used efficiently.

283.Constructors in a class can be?

a. may be defined as private

b. Contains same name as class

c. used to create objects

d. all the above

284. Spring is tightly coupled framework using DI.

a) True

b) False

285. Which is correct?

- a. Hibernate is an object oriented query language
- b. It is database independent
- c. it supports pagination
- d. HQL statements will be converted to SQL or other language the database supports
- e. **all the above**

286. Which State does data contains----- **model**

287. Using the Spring AOP framework, what are the joinpoint methods of the following pointcut expressions?

execution(public * *(..))

- a. **The execution of all public method**
- b. The execution of all public method returning a value
- c. The execution of all public method having at least one parameter
- d. The execution of all public method in class belonging to the default java package

288. Identify the annotation which simply indicates that the affected bean property must be populated at configuration time, through an explicit property value in a bean definition or through autowiring. The container throws BeanInitializationException if the affected bean property has not been populated.

@Required

289 What ORM stands for?

- A) Object Relation Map
- B)Object Relational Mapping**
- C)Object Record Mapping
- D)None of the above.

290 Which of the following is true about configuration component of Hibernate?

- A) The Configuration object is the first Hibernate object you create in any Hibernate application.
- B)The Configuration object is usually created only once during application initialization.
- C)The Configuration object represents a configuration or properties file required by the Hibernate.
- D)All of the above.**

291 Session.createQuery creates a new instance of Query for the given HQL query string.

- A) True**
- B)False

292. Which element of hbm.xml defines maps the unique ID attribute in class to the primary key of the database table?

- A) Id**
- B)Generator
- C)Primary Key
- D)None of the above.

293. Which of the following element maps java.util.SortedMap property in hibernate?

- A) <set>
- B)<list>
- C)<bag>
- D)<map>**

294. What is lazy loading?

- A) Lazy loading is a technique in which objects are loaded on demand basis.**
- B)Lazy loading is a technique in which objects are persisted on demand basis.
- C)Both of the above.
- D)None of the above.

295. What is first level cache in hibernate?

- A) The first-level cache is the Session based cache.**

- B)The first-level cache is the SessionFactory based cache.
- C)Both of the above.
- D)None of the above.

296. When a Transactional concurrency strategy is to be used?

- A) Use it for reference data only.
- B)Use this strategy for read-mostly data where it is critical to prevent stale data in concurrent transactions.**
- C)Use this strategy if data hardly ever changes and a small likelihood of stale data is not of critical concern.
- D)None of the above.

297. Which of the following is a core component of Hibernate?

- A) Transaction
- B)SessionFactory
- C)Session
- D)All of the above**

298. Which of the following is true about @GeneratedValue annotation?

- A) @GeneratedValue annotation takes two parameters strategy and generator.
- B)@GeneratedValue annotation provides the primary key generation strategy to be used.
- C)Both of the above.**
- D)None of the above.

299. Which of the following is not an ORM framework?

- A) Castor
- B)Spring DAO
- C)Hibernate
- D)NoSQL**

300. Which of the following is true about SessionFactory object in hibernate?

- A) The SessionFactory is heavyweight object.
- B)SessionFactory object is created during application start up and kept for later use.
- C)You would need one SessionFactory object per database using a separate configuration file.
- D)All of the above.**

301. Which of the following is true about transient state of a persistent entity?

- A) A new instance of a persistent class which is not associated with a Session
- B)A new instance of a persistent class which has no representation in the database.
- C)A new instance of a persistent class which has no identifier value.
- D)All of the above.**

302. Which method is used to re-read the state of the given instance from the underlying database?

- A) Session.refresh()**
- B)Session.get()
- C)Session.reload()
- D)Session.retrieve()

303. Which of the following element maps java.util.List property in hibernate?

- A) <set>
- B)<list>**
- C)<bag>
- D)<map>

304. Child objects are not loaded when parent is loaded/populated from database. What this technique is called?

- A) Eager Loading
- B)Lazy Loading**
- C)Request based Loading

D)None of the above.

305. What HQL stands for?

A) Hibernate Query Language

B)High Query Language

C)Hybrid Query Language

D)None of the above.

306. Form tags are available in springs is more compatible with html tags for better development

State True or False

a) true

b) false

307. A Session is used to get a physical connection with a database.

A) true

B>false

308. Which of the following is true about HQL?

A) Hibernate supports named parameters in its HQL queries.

B)HQL supports a range of aggregate methods, similar to SQL.

C)Both of the above.

D)None of the above.

309. Which of the following is true about hibernate. Dialect property in hibernate configuration?

A) This property makes Hibernate generate the appropriate SQL for the chosen database.

B)This property makes Hibernate generate the appropriate java code for the chosen database.

C)Both of the above.

D)None of the above.

310. Which method is used to save the state of the given instance from the underlying database?

- A) Session. Store ()
- B)Session. Keep ()
- C)Session. Save ()**
- D)Session. Load ()

311. Which of the following is correct about dependency injection?

- A) It helps in decoupling application objects from each other.**
- B)It helps in deciding the dependencies of objects.
- C)It stores objects states in database.
- D)It stores object states in file system.

312. Configure single sessionFactory per database, using separate configuration file.

- a) True**
- b) False

313. When a Read-write concurrency strategy is to be used?

- A) Use it for reference data only.
- B)Use this strategy for read-mostly data where it is critical to prevent stale data in concurrent transactions.**
- C)Use this strategy if data hardly ever changes and a small likelihood of stale data is not of critical concern.
- D)None of the above.

314. What is Advice?

- A) This is the way to instruct object to behave in certain manner.
- B)This is used to inject values in objects.
- C)This is the actual action to be taken either before or after the method execution.**
- D)This is not invoked during program execution by Spring AOP framework.

315. 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.

316. 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.

317. By default a bean is eagerly loaded.

A) False

B)True

318.A bean must have id attribute in beans configuration file.

A) True

B)False

319. 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.

320. Which of the statement is not correct?

A) Core and beans modules provide the fundamental parts of the framework, including Dependency Injection feature.

B)The SpEL module provides a powerful Expression Language for querying and manipulating an object graph at runtime.

C)Aspects module provides integration with AspectJ.

D)None of the above.

321. What is singleton scope?

A) This scopes the bean definition to a single instance per Spring IoC container.

B)This scopes the bean definition to a single instance per HTTP Request.

C)This scopes the bean definition to a single instance per HTTP Session.

D)This scopes the bean definition to a single instance per HTTP Application/ Global session.

322. Which of the following object is used to create SessionFactory object in hibernate?

A) Configuration

B)Session

C)SessionFactory

D)Transaction

323. 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.

324. Which ORM Spring supports ?

A) Hibernate

B)iBatis

C)JPA

D)All of above.

325. How to handle shut down of IoC container?

A) Using shutdownHook()

- B)Using shutdownHandler()
- C)Using registerHook()
- D)Using registerShutdownHook()**

326. Which of the following class can be used to execute Sql queries in spring?

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

327. Which is the correct implementation class of BeanFactory?

- A) XmlBeanFactory**
- B)ClassPathBeanFactory
- C)FileSystemBeanFactory
- D)AdvancedBeanFactory

328. What is bean autowiring?

- A) Autowiring lets Spring resolve collaborators (other beans) for your bean by inspecting the contents of the BeanFactory without using <constructor-arg> and <property> elements.**
- B)Autowiring injects values in spring beans.
- C)Autowiring injects one bean into another.
- D)Autowiring helps in wiring a list of values, allowing duplicates.

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

- A) Using new keyword
- B)Using dependency injection**

330. If a bean is scoped to HTTP request, scope is

- A) session
- B)global-session

C)prototype

D)request

331. Can be bean be configured to have an inner bean?

A) True

B)False

332. What is global-session scope?

A) This scopes a bean definition to an HTTP Application/ Global session.

B)This scopes the bean definition to Spring IoC container.

C)This scopes the bean definition to HTTP request.

D)This scopes the bean definition to HTTP Session.

333. 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.

334. Core container has AOP as one of its module.

A) True

B)False

335. Which class is used to map a database row to a java object in spring?

A) ResultSet

B)RowMapper

C)RowSetMapper

D)ResultSetMapper

336. Which are the modules of Data Access/ integration layer?

A) JDBC, ORM, OXM, JMS, Transactions

B)JDBC, ORM, OXM, JMS

C)JDBC, ORM, Web, Beans

D)JDBC, ORM, OXM, JMS

337. Which of the statement is correct?

A) The JDBC module provides a JDBC-abstraction layer that removes the need to do tedious JDBC related coding

B)The ORM module provides integration layers for popular object-relational mapping APIs, including JPA, JDO, Hibernate, and iBatis.

C)The Java Messaging Service JMS module contains features for producing and consuming messages.

D)All of the above.

338. What is true about <map> collection configuration elements?

A) This helps in wiring a list of values, allowing duplicates.

B)This helps in wiring a list of values but without any duplicates.

C)This can be used to inject a collection of name-value pairs where name and value can be of any type.

D)This tag is not supported.

339. What is true about @Autowired annotation?

A) The @Autowired annotation can be used to autowire bean on the setter method.

B)This annotation provides more fine-grained control over where and how autowiring should be accomplished.

C)The @Autowired annotation can be used to autowire bean on the methods with arbitrary names and/or multiple arguments.

D)All of above.

340. 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.

341. 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.

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

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

343. What are the main advantage(s) for using Spring when writing integration tests?

- a) Reuse Spring configuration files of the application**
- b) Create mock or stub
- c) Be able to use the rollback after the test pattern**
- d) Use dependency injection

344. What is true about <set> collection configuration elements?

- A) This helps in wiring a list of values, allowing duplicates.
- B)This helps in wiring a list of values but without any duplicates.**
- C)This can be used to inject a collection of name-value pairs where name and value can be of any type.
- D)This can be used to inject a collection of name-value pairs where the name and value are both Strings.

345. 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**

346. Which of the following is part of Data Access layer in Spring framework?

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

347. 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.

348. Which are the IoC containers in Spring?

- A) BeanFactory, ApplicationContext**
- B) BeanFactory, ApplicationContext, IoCContextFactory
- C) BeanFactory, BeanContext, IoCContextFactory
- D) BeanFactory, ApplicationContext, BeanContext

349. What is no mode of autowiring?

- A) Default setting which means no autowiring and you should use explicit bean reference for wiring.**
- B) Autowiring by property name.
- C) Spring first tries to wire using autowire by constructor, if it does not work, Spring tries to autowire by byType.
- D) Similar to byType, but type applies to constructor arguments.

350. What is ContextRefreshedEvent event?

- A) This event is published when the Servlet Context is either initialized or refreshed.
- B) This event is published when the HTTP Request is received.
- C) This event is published when the HTTP Response is returned.
- D) This event is published when the ApplicationContext is either initialized or refreshed.**

351. 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.

352. 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.

353. What is true about cross-cutting concerns?

- A) The functions that span multiple points of an application are called cross cutting concerns.**
- B)Cross-cutting concerns are conceptually separate from the application's business logic.
- C)Logging is one of the examples of cross cutting concerns.
- D)All of the above.

354. What is true about <props> collection configuration elements?

- A) This helps in wiring a list of values, allowing duplicates.
- B)This helps in wiring a list of values but without any duplicates.
- C)This can be used to inject a collection of name-value pairs where name and value can be of any type.
- D)This can be used to inject a collection of name-value pairs where the name and value are both Strings.**

355. What is byType mode of autowiring?

- A) Default setting which means no autowiring and you should use explicit bean reference for wiring.
- B)Autowiring by property name. Spring tries to match and wire its properties with the beans defined by the same names in the configuration file.

C)Spring first tries to wire using autowire by constructor, if it does not work, Spring tries to autowire by byType.

D)Autowiring by property type. Spring tries to match and wire a property if its type matches with exactly one of the beans name in configuration file.

356. 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.

357. 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");(checkbox ques)

a) The classpath: prefix could be omit

b) Package name with dot is not well formatted using the dot character

c) The slash character preceding com.example could be omit

d) **All of the above**

e) None of the above

358. If a bean can be created any number of times, scope is

A) session

B)global-session

C)prototype

D)request

359. What is spring?

A) Spring is an open source development framework for enterprise Java.

- B)Spring is a proprietary framework.
- C)Spring is a development framework for .Net applications.
- D)Spring is a development framework for PHP based applications.

360. What is prototype scope?

- A) This scopes a single bean definition to have any number of object instances.**
- B)This scopes the bean definition to a single instance per HTTP Request.
- C)This scopes the bean definition to a single instance per HTTP Session.
- D)This scopes the bean definition to a single instance per HTTP Application/ Global session.

361. What does @Required annotation mean?

- A) This annotation indicates that bean property must be populated by the user.
- B)This annotation indicates that bean property is required while saving the bean data to database.
- C)This annotation simply indicates that the affected bean property must be populated at configuration time, through an explicit property value in a bean definition or through autowiring.**
- D)This annotation indicates that bean property is required while serializing the bean.

362. 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.

363. Which of the following database is not supported using jdbcTemplate?

- A) MySql
- B)PostgresSql
- C)NoSql**
- D)Oracle

364. What is the scope of stateless bean?

A) global-session

B) singleton

C) prototype

D) request

365. Which are the modules of core container?

A) Beans, Core, Context, SpEL

B) Core, Context, ORM, Web

C) Core, Context, Aspects, Test

D) Bean, Core, Context, Test

366. What is/are typically case(s) where you usually need to manually instantiate an ApplicationContext?

a) In a web application

b) In an integration test running with the SpringJUnit4ClassRunner

c) In a standalone application started with a main method

d) None of the above

367. What is aspect?

A) Aspect is a way to do the dependency injection.

B) A module which has a set of APIs providing cross-cutting requirements.

C) Aspect is used to log information of application.

D) Aspect represents properties of spring based application.

368. 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

367. Can we integrate Struts with Spring.

A) Yes

B)No

368. Which are the different modes of autowiring?

A) no, byName, byType, constructor, autodetect

B)no, byName, byType, constructor, autocorrect

C)byName, byContent, constructor, autodetect

D)byName, byContent, setter, autodetect

369. By default a bean is eagerly loaded.

A) False

B)True

370. Where do you define DispatcherServlet?

A) In Beans configuration file.

B)Web.xml file

C)Meta-inf/dispatcher.xml

D)Web-inf/ dispatcher.xml

371. 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.

372. Hibernate session is the main runtime interface between java applications and hibernate.

a) TRUE

b) FALSE

373. Which of the following is true about @Column annotation?

- A) The @Column annotation is used to specify the details of the column to which a field or property will be mapped.
- B)The @Column annotation is applied on a class.
- C)Both of the above.**
- D)None of the above.

374. 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.

375. 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

376. What is RequestHandledEvent:event?

- A) This event is published when the Servlet Context is either initialized or refreshed.
- B)This event is published when the HTTP Request is received.
- C)This event is published when the HTTP session is initialized or refreshed.**
- D)This event is published when the HTTP Request is serviced.

377. Application contexts provide a generic way to load file resources, such as images.

- a) True**
- b) False

378. What is easier to do by using Spring JMS support? Select one or more correct answers.

- a. **Register any Spring bean as JMX MBean**
- b. **Register an existing MBean with a MBeanServer**
- c. **Accessing to remote MBean**
- d. **Control the attributes and the operations of a Spring bean exposes as a MBean**

379. What is the scope of bean in portlet context?

A) session

B)global-session

C)prototype

D)request

380. What is autodetect mode of autowiring?

A) Similar to byType, but type applies to constructor arguments. If there is not exactly one bean of the constructor argument type in the container, a fatal error is raised.

B)Autowiring by property name. Spring tries to match and wire its properties with the beans defined by the same names in the configuration file.

C)Spring first tries to wire using autowire by constructor, if it does not work, Spring tries to autowire by byType.

D)Autowiring by property type. Spring tries to match and wire a property if its type matches with exactly one of the beans name in configuration file.

381. What is Pointcut?

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

B)This is a set of one or more joinpoints where an advice should be executed.

C)This is used to inject values in objects.

D)This is invoked during program execution by Spring AOP framework.

382. Which class acts as IoC Container?

A) ServletContext

B)DispatcherServlet

C)ApplicationContext

D)None of the above

383. What is constructor mode of autowiring?

A) Autowiring by property name. Spring tries to match and wire its properties with the beans defined by the same names in the configuration file.

B)Spring first tries to wire using autowire by constructor, if it does not work, Spring tries to autowire by byType.

C)Autowiring by property type. Spring tries to match and wire a property if its type matches with exactly one of the beans name in configuration file.

D)Similar to byType, but type applies to constructor arguments. If there is not exactly one bean of the constructor argument type in the container, a fatal error is raised.

384. 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

385. Which of the following class can be used to call Stored Procedures in spring?

A) SPHelper

B)JdbcTemplateCall

C)JdbcTemplate

D)SimpleJdbcCall

386. Which element of hbm.xml is used to map a Java class property to a column in the database table?

A) id

B)generator

C)property

D)class

387. 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.

388. validation, rejectIfEmptyOrWhiteSpace or rejectIfEmpty is used- **True**

389. Cache is simply to enhance the performance and it sits between application and database.

a) True

b) False

390.Hibernate helps in mapping of java objects with database tables

a) true

b) false

391. Scope that are used only in web aware application context

- Request
- Session
- Global session

392. What is Query level cache in hibernate?

A) The query-level cache is cache for query result sets that integrates closely with the second-level cache.

B)The query-level cache is the Session based cache.

C)Both of the above.

D)None of the above.

393. Which of the following is a concurrency strategy in hibernate?

A) Transactional

B)Read-write

C)No strict-read-write.

D)All of the above.

394. Which of the following is true about @Id annotation?

A) Hibernate detects that the @Id annotation is on a field.

B)Hibernate assumes that it should access properties on an object directly through fields at runtime.

C)Both of the above.

D)None of the above.

395. Which of the following is true about HQL?

A) HQL queries are translated by Hibernate into conventional SQL queries which in turns perform action on database.

B)The AS clause can be used to assign aliases to the classes in HQL queries.

C)Both of the above.

D)None of the above.

396. Which of the following is true about ORM?

A) ORM stands for Object-Relational Mapping.

B)ORM is a programming technique for converting data between relational databases.

C)Both of the above.

D)None of the above.

397. Which of the following is true about Query object in hibernate?

A) Query objects Hibernate Query Language (HQL) string to retrieve data from the database and create objects.

B)Query objects SQL string to retrieve data from the database and create objects.

C)A Query instance is used to bind query parameters, limit the number of results returned by the query, and finally to execute the query.

D)All of the above.

398. Session.createSQLQuery creates a new instance of Query for the given SQL query string.

A) true

B>false

399. Which method is used to get a persistent instance from the datastore?

A) Session.read()

B)Session.get()

C)Session.retrieve()

D)Session.fetch()

400. Which of the following is true about <generator> element?

A) The <generator> element within the id element is used to automatically generate the primary key values

B)Set the class attribute of the generator element is set to native to let hibernate pick up either identity, sequence or Hilo algorithm to create primary key depending upon the capabilities of the underlying database.

C)Both of the above.

D)None of the above.

401. Which of the following element is used to represent one-to-many relationship in hibernate?

A) <one-to-many>

B)<one-many>

C)<OneToMany>

D)None of the above.

402. Is query level caching mandatory in hibernate?

A) true

B>false

403. When a Read-only concurrency strategy is to be used?

A) Use it for reference data only.

B)Use this strategy for read-mostly data where it is critical to prevent stale data in concurrent transactions.

C)Use this strategy if data hardly ever changes and a small likelihood of stale data is not of critical concern.

D)None of the above.

404. Which of the following is true about hibernate annotations?

A) Hibernate Annotations is the powerful way to provide the metadata for the Object and Relational Table mapping.

B)All the metadata is clubbed into the POJO java file along with the code this helps the user to understand the table structure and POJO simultaneously during the development.

C)Both of the above.

D)None of the above.

405. Which of the following is not a core component of Hibernate?

A) JDBC

B)SessionFactory

C)Session

D)Configuration

406. Is Session a thread-safe object?

A) true

B>false

407. Which method is used to remove a persistent instance from the datastore?

A) Session.delete()

B)Session.remove()

C)Session.del()

D)Session.rm()

408. Which method is used to save or update the state of the given instance from the underlying database?

A) Session.saveOrUpdate()

B)Session.keep()

C)Session.update()

D)Session.load()

409. Is first level caching mandatory in hibernate?

A) true

B>false

410.which of the following is an invalid annotation?

a) @RequestParam

b) @PathValid

c) @Responsevalid

d) @RequestMapping

411. POM file should contain versionID, groupId, ArtifactId----- **True**

412. Types of aspect implementation

- XML schema based
- Java Based
- @AspectJ based

413. How could you implement a JMS Listener using the Spring JMS support? Select one or more correct answers.

- a. By implementing the javax.jms.MessageListener interface**
- b. By implementing the SessionAwareMessageListener interface provided by Spring**
- c. Without any code, only using the jms namespace provided by Spring
- d. By writing a single POJO without parent class or interface**

414. Which of the following is true about Transaction object in hibernate?

- A) A Transaction represents a unit of work with the database.
- B) Transactions in Hibernate are handled by an underlying transaction manager.
- C) This is an optional object and Hibernate applications may choose not to use this interface, instead managing transactions in their own application code.
- D) All of the above**

415. What do you have to do even if you are using the RMI Spring Remoting support? Select one or more correct answers.

- a. Implements the Remote interface
- b. Extends the RemoteObject class
- c. Catching the RemoteException exception
- d. Implements the Serializable interface**

416. What is a view resolver?

- a) class
- b) interface**
- c) object
- d) argument

417. Model is used to encapsulate the response data

- a) true**
- b) false

418. Which one interpret user input and transform it into a model that is represented to the user by the view.

- a) controller**
- b) dispatcher servlet
- c) model
- d) browser

419. Which one runs advice before and after the advised method is invoked.

- a) after
- b) before
- c) around**
- d) none of the above

420. Length attribute of @column annotation permits the size of the column used to map a value particularly for a string value.

- a) **true**
- b) false

421. Application contexts can publish events to beans that are registered as listeners.

a) true

b) false

422. which is not used as java annotation

- a) @component
- b) @bean
- c) @configuration
- d) none**

423. What the three inheritance models of hibernate?

Hibernate has following three inheritance models:

a. Tables Per Concrete Class

b. Table per class hierarchy

c. Table per sub-class

424. To use spring MVC validator, which of the following is used to start the validator?- ve to select more than 1 so I chose al the check box..

- A) override supports
- B) override validate
- C) override validator**
- D) override creates

425. index and type can be used in the constructor-arg at the same time?

State True or False

a)TRUE

b) FALSE

426. Spring offers four types of collection configuration elements.

- List
- Set
- Map

427. Which of the following database is supported by Hibernate?

A) DB2/NT

B)PostgreSQL

C)Sybase SQL Server

D)All of the above

428. Configuration object is used to create SessionFactory object in hibernate.

A) true

B>false

429. Which of the following is the root node of hbm.xml file?

A) hibernate-mapping

B)hibernate-config

C)class-mapping

D)class-config

430. What is exact about the HttpInvokerServiceExporter? Select one or more correct answers.

- a. **Has to run into a HTTP server as Jetty**
- b. Could process both POST and GET requests
- c. **Could be used with any http client as Jakarta Commons HttpClient**
- d. Could consume SOAP http request

431. What is the method that is not provided by the JmsTemplate Spring class?

- a. convertAndSend
- b. **onMessage**
- c. receiveAndConvert
- d. setDefaultDestination

432. How is named the bean that is 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;
    }
}
```

- 1. JpaClientRepository
- 2. jpaClientRepository
- 3. **clientRepository**
- 4. Two beans are defined : a data souce and a repository

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

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

434. What is the purpose of the @ManageResource annotation? Select a single answer.

- a. Expose a bean's property (getter/setter) to JMX
- b. Expose a bean's method to JMX

- c. **Identify a Spring bean as a JMX MBean**
- d. None of the above

435. What are the right affirmations about the @PostConstruct, @Resource and the @PreDestroy annotations?

- a. **Those annotations are specified in the JSR-250**
- b. The Spring Framework embedded those annotation
- c. **The <context:component-scan> tag enable them**
- d. **The <context:annotation-config > tag enable them**
- e. **Declaring the CommonAnnotationBeanPostProcessor enable them**

436. What is/are typically case(s) where you usually need to manually instantiated an ApplicationContext?

- a. In a web application
- b. In an integration test running with the SpringJUnit4ClassRunner
- c. **In a standalone application started with a main method**
- d. None of the above

437. 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) The classpath: prefix could be omit
- b) Package name with dot is not well formatted using the dot character
- c) The slash character preceding com.example could be omit
- d) **All of the above**
- e) None of the above

438. How to auto-inject into a field a bean by its name? Select one or more response.

- a) With the name attribute of the @Autowired annotation
- b) By using the single @Qualifier annotation
- c) **By using both the @Autowired and the @Qualifier spring annotations**

d) By using the @Autowired annotation and naming the field with the bean name

439. What are the main advantages of using interfaces when designing business services? Select one or more answers.

- a. Mocking or stubbing the service**
- b. Be able to use the Spring auto-injection
- c. Can do dependency checking
- d. Loosely coupled code**

440. Select one or many correct answers about spring bean life cycle.

- 1. The method annotated with @PostConstruct is called after bean instantiation and before properties setting of the bean
- 2. The method @PreDestroy of a prototype bean is called when the bean is garbage collected
- 3. The init() method declared in the init-method attribute of a bean is called before the afterPropertiesSet callback method of the InitializingBean interface
- 4. The method annotated with @PostConstruct is called before the afterPropertiesSet callback method of the InitializingBean interface**

441. Given the following configuration class, what are 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

442. What are the features of the XML <context: namespace? Select one or many answers.

- 1. @Transactional annotation scanning
- 2. @Aspect annotation detection enabling
- 3. @Autowired annotation enabling**
- 4. @Component annotation scanning**

443. Select one or more correct statements about developing integration test with Spring support.

- a) A new Spring context is created for each test class
- b) To get a reference on the bean you want to test, you have to call the `getBean()` method of the Spring context
- c) Spring context configuration could be inherits from the super class**
- d) The Spring context configuration file has to be provided to the `@ContextConfiguration` annotation

444. What are the main advantage(s) for using Spring when writing integration tests?

- a. Reuse Spring configuration files of the application**
- b. Create mock or stub
- c. Be able to use the rollback after the test pattern**
- d. Use dependency injection**

445. What are the main advantage(s) for using Spring when writing unit tests?

- a. Reuse Spring configuration files of the application
- b. Use dependency injection
- c. Provide some mocks for servlet classes**
- d. All of the above
- e. None of the above

446. What is right about the spring test module?

- a. It provides an abstraction layer for the main open source mock frameworks
- b. Provides the `@Mock` annotation
- c. It dynamically generates mock objects
- d. All of the above
- e. None of the above**

447. Select correct statement(s) about transactional support of the spring test module.

- 1. Transaction manager could be set within the `@TransactionConfiguration` annotation**
- 2. Method annotated with `@Before` is executed outside of the test's transaction
- 3. Spring test may rollback the transaction of a service configured with the `REQUIRES_NEW`

propagation

4. The transaction of a method annotated with the @Rollback annotation with its default values is rolled back after the method has completed

448. Considering 2 classes AccountServiceImpl and ClientServiceImpl. Any of these 2 classes inherits from each other. What is the result of the pointcut expressions?

execution(* *..AccountServiceImpl.update(..))

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

1. Matches public update methods of the 2 classes, whatever the arguments
2. Matches any update methods of the 2 classes, whatever the arguments and method visibility
3. Matches any update methods of the 2 classes, with one more arguments and whatever method visibility

4. No joint point is defined

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

@Pointcut("execution(* *(..))")

private void anyOperation() {};

1. All methods, whereas there visibility
2. All methods, except private method
3. Protected and public methods

4. Public methods

500. What are the 2 correct statements about AOP proxy?

- 1. AOP proxies are created by Spring in order to implement the aspect contracts**
2. AOP proxies are always created with a JDK dynamic proxy
3. Only classes that implements a least one interface could be proxied
4. All methods could be proxied

5. Proxies are created by a BeanPostProcessor

501. What is an after throwing advice? Select a unique answer.

1. Advice that could throw an exception
- 2. Advice to be executed if a method exits by throwing an exception**
3. Advice that executes before a join point
4. Spring does not provide this type of advice

502. What is an after returning advice? Select a unique answer.

1. Advice to be executed regardless of the means by which a join point exits
2. Advice that surrounds a method invocation and can perform custom behavior before and after the method invocation
3. Advice to be executed before method invocation
- 4. Advice to be executed after a join point completes without throwing an exception**

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

- 1. An action taken by an aspect at a particular join point**
2. A point during the execution of a program
3. An aspect and a pointcut
4. A predicate that matches join points

504. What is a pointcut? Select a unique answer.

1. Code to execute at a join point
- 2. An expression to identify joinpoints**
3. An advice and a jointpoint
4. None of the above

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

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

- 1. void com.test.service.MyServiceImpl#transfert(Money amount)**
2. void com.test.service.MyServiceImpl#transfert(Account account, Money amount)
- 3. void com.test.service.account.MyServiceImpl#transfert(Money amount)**
4. void com.test.service.account.MyServiceImpl#transfert(Account account, Money amount)
5. None of the above

506. What are the unique correct answers about Spring AOP support?

1. An advice could proxied a constructor's class
- 2. A point cut could select methods that have a custom annotation**
3. Static initialization code could be targeted by a point cut
4. Combination of pointcuts by &&, || and the ! operators is not supported

507. Using the Spring AOP framework, what are the joinpoint methods of the following pointcut expressions?

execution(public * *(..))

- 1. The execution of all public method**
2. The execution of all public method returning a value
3. The execution of all public method having at least one parameter
4. The execution of all public method in class belonging to the default java package

508. Why is it a best practice to mark transaction as read-only when code does not write anything to the database? Select one or more answers.

1. It is mandatory for using Spring exception translation mechanism
- 2. May be improve performance when using Hibernate**
3. Spring optimizes its transaction interceptor
- 4. Provides safeguards with Oracle and some other databases**

509. What data access technology is supported by the Spring framework? Select one or more answers.

- 1. JDBC**
2. NoSQL
- 3. Hibernate**
- 4. JPA**

510. What is not provided by the JdbcTemplate? Select a unique answer.

- 1. Data source access**
2. Open/close data source connection
3. JDBC exception wrapping into DataAccess Exception
4. JDBC statement execution

511. 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.

1. RowMapper
2. RowCallbackHandler
- 3. ResultSetExtractor**
4. ResultSetMapper

512. What configuration is supported by the LocalSessionFactoryBean? Select a unique answer.

1. Listing entity classes annotated with @Entity
2. Scanning a package to detect annotated entity classes (with @Entity)
- 3. Listing hibernate XML mapping configuration file (.hbm.xml)**
4. All above

513. What is/are incorrect statements about XML declaration of the transaction manager bean? Select one or more answers.

1. The tx namespace provides JTA transaction manager declaration shortcut syntax
- 2. Id of the bean has to be *transactionManager***
3. Depending the application persistence technology, the HibernateTransactionManager or the DataSourceTransactionManager could be used as bean class
4. Default transaction timeout could be given

514. Assuming @Transactional annotation support is enabled and the transferMoney method is called through a Spring AOP proxy, what is the behavior of the following code sample?

```
@Transactional(propagation=Propagation.REQUIRED)
public void transferMoney(Account src, Account target, double amount) {
    add(src, -amount);
    add(src, amount);
}

@Transactional(propagation=Propagation.REQUIRES_NEW)
public void add(Account account, Double amount) {
    // IMPLEMENTATION
}
```

- a. The add() method executes code in a new transaction

- b. The add() method uses the transaction of the transferMoney() method**
- c. When calling the add() method, an exception is thrown
- d. Other behavior

515. Does Spring provides programmatic transaction management? Select a unique answer.

- a. Yes with the TransactionTemplate class**
- b. Yes with the TransactionService class
- c. Yes using the @Transactional bean post processor
- d. No

516. What is the transaction behavior of the PROPAGATION_REQUIRES_NEW mode? Select a unique answer.

1. If a transaction exists, the current method should run within this transaction. Otherwise, it should start a new transaction and run within its own transaction.

2. If a transaction is in progress, the current method should run within the nested transaction of the existing transaction. Otherwise, a new transaction has to be started and run within its own transaction.

3. The current method must start a new transaction and run within its own transaction. If there is an existing transaction in progress, it is suspended.

4. None of the above

517. What is the default rollback policy in transaction management?

- a. Rollback for any Exception
- b. Rollback for RuntimeException**
- c. Rollback for checked exceptions
- d. Always commit

518. What could not return a Spring MVC controller? Select a single answer.

- a. An absolute path to the view**
- b. A logical view name
- c. A new JstlView

- d. void
- e. null value

519. Where do you cannot declare Spring MVC controller? Select one or more answers.

- 1. In a Spring application context XML configuration file
- 2. Into the web.xml file of the web application**
- 3. Into the java code by using annotations
- 4. Into the JSP pages**

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

- 1. void displayAccount(HttpServletRequest req, HttpServletResponse resp)
throws ServletException, IOException**
- 2. void displayAccount(HttpServletRequest req, HttpSession session)
throws ServletException, IOException**
- 3. @RequestMapping("/displayAccount")
String displayAccount(@RequestParam("accountId") int id, Model model)**
- 4. @RequestMapping("/displayAccount")
String displayAccount(@PathVariable("accountId") int id, Model model)**

521. How could you secure MVC controller with Spring Security? Select a unique answer.

- a) With the @Secured annotation
- b) With the @RolesAllowed annotation
- c) In a XML security configuration file
- d) All of the above**
- e) None of the above

522. What are the possible mechanisms provided by Spring Security to store user details? Select one or more correct answers.

- a. Database**
- b. JAAS**
- c. LDAP**
- d. Properties file**

523. What is true about Spring security configuration and the security namespace? Select one or more correct answers.

- a. The access attribute of the intercept-url tag support both EL and constants together.
- b. The patterns declared into the intercept-url tag are analyzed from up to bottom. Winning is the first that matches.**

- a. The patterns declared into the intercept-url tag use by default the java regex syntax.
- b. Security rules may applied depending request parameter

524. A many-to-one association is the most common kind of association where an object can be associated with multiple objects.

a)true

b>false

525. what does hibernate do in the listed options?

- a) Guaranteed uniqueness of object
- b) Transparent persistence
- c) Persistence of association and collection
- d) Object relational mapping
- e) all**

526. The bean in the xml file is important for specifying the view resolver and view components

a)true

b>false

527. Spring security framework focuses on which of the following?

- a) Providing authorization in java applications
- b) Providing authentication in java applications
- c) Providing both authorization and authentication in java application**
- d) None

528. Spring provides @Validator annotation and Binding Result class through which we can get the errors raised by Validator implementation in the controller request handler method.

A)true

B>false

529. spring has which of the ways to minimize XML in spring.config.xml?

- a) Using auto wiring
- b) All**
- c) Using Auto-Discovery of beans

d) Using java based configuration

530.spring provides a comprehensive set of data binding-aware tags for handling form elements when using JSP and spring web MVC

a)true

b>false

531.how do you define the scope of a bean

a) When defining a <bean> in a spring we can declare the scope of a bean

b) It can be defined through scope attribute in the bean definition

c) The bean scope attribute must be set to prototype

532.which of the following statements are false?

a)The ORM package provides integration layers for popular ORM API's including JPA,JDO,hibernate and iBatis

b)None

c) The core package is the most fundamental part of the framework and provides Ioc and dependency injection features

533.SessionFactory allows application to create hibernate session by reading hibernate configuration file hibernate.cfg.xml

a)true

b>false

534.which of the activities does data filtering do?

a) Often used for security purpose

b) Limit the amount of invisible data by modifying query parameters

c) Users often only have access to certain level of information

d) Similar to label security in database

535.which of the following define why spring is necessary?

a) All framework have difficulty to integrate with spring

b) Easier to test application

c) Spring framework is unstructured using dependency injection

d) Less complicated than other framework

536. to create new xml configuration extension which of the following are relatively simple steps

a)all

b)coding one or more BeanDefinitionParser implementation

c)coding a custom NamespaceHandler implementation

d)authoring an XML schema to describe your custom elements

e)registering all artefacts with the spring

537. which of the following statements are view resolver pattern and works in spring MVC?

a)it is a J2EE pattern which allows a web application to dynamically choose a view technology

b) spring MVC framework supplies inbuilt view resolver for selecting view

c)view resolver holds mapping of different views ,controller return the name of the view which is then passed to the view resolver for a appropriate view

d)its does not support HTML, JSP, Tapestry, JSF and other controller technologies