1 - Which of the following is not a core component of Hibernate?
   a. JDBC
   b. SessionFactory
   c. Session
   d. Configuration

2 - 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.

3 - Session.beginTransaction method begins a unit of work and returns the associated Transaction object.
a - true
b - false

4 - 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()

5 - 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.

6 - 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.

7 - 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.

8 - 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.

9 - 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.

10 - 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.

11 - 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.

12 - Which of the following is not a core component of Hibernate?

A - Transaction

B - Provider

C - Criteria

D - Query

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

A - true

B - false

14 - 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.

15 - Which of the following element maps java.util.Set property in hibernate?
A - <set>
B - <list>
C - <bag>
D - <map>

16 - 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.

17 - What HQL stands for?
A - Hibernate Query Language
B - High Query Language
C - Hybrid Query Language
D - None of the above.

18. Which of the following is a concurrency strategies in hibernate?
A - Transactional
B - Read-write
C - Nonstrict-read-write.
D - All of the above.

19 - 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.

20 - 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.

21 - Which of the following tools/frameworks provides integration with Hibernate?

A - XDoclet Spring
B - J2EE
C - Maven
D - All of the above.

22 - Which of the following is not a core component of Hibernate?
A - Transaction
B - Provider
C - Criteria
D - Query

23 - Session.createSQLQuery creates a new instance of Query for the given HQL query string.
A - true
B - false

24 - Which of the following elements is used to define specific mappings from a Java classes to the database tables?
A - property
B - hibernate-config
C - class
D - class-config

25 - 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.

26 - 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.

27 - What HQL stands for?
A - Hibernate Query Language
B - High Query Language
C - Hybrid Query Language
D - None of the above.

28 - 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.

29 - Configuration object is used to create SessionFactory object in hibernate.
A - true
B - false

30 - name attribute of @Column annotation permits the name of the column to be explicitly specified.
A - true
B - false

31 - Which of the following is true about persistent state of a persistent entity?
A – You can make a transient instance persistent by associating it with a Session.
B – A persistent instance has a representation in the database.
C – A persistent instance has an identifier value.
D - All of the above.

32 - Which of the following is the root node of hbm.xml file?
A - hibernate-mapping
B – hibernate-config
C – class-mapping
D – class-config

33 - 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.

34 - Which of the following is true about HQL?
A - HQL takes java objects in the same way as SQL takes tables.
B - HQL is a Object Oriented Query language
C - HQL is database independent.
D - All of the above.

35 - 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.

36 - 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.

37 - Which of the following is true about JDBC?
A – JDBC stands for Java Database Connectivity.
B – JDBC provides a set of Java API for accessing the relational databases from Java program.
C – JDBC APIs enables Java programs to execute SQL statements and interact with any SQL compliant database.
D - All of the above.

38 - Which of the following is true about detached state of a persistent entity?
A - Once we close the Hibernate Session, the persistent instance will become a detached instance.
B – A new instance of a persistent class which is not associated with a Session.
C – You can make a transient instance detached by associating it with a Session.
D – None of the above.

39 - Which of the following is true about second level cache in hibernate?
A – The second-level cache is the SessionFactory based cache.
B – The second-level cache can be configured on a per-class and per-collection basis.
C – The second-level cache is mainly responsible for caching objects across sessions.
D - All of the above.

40 - Which of the following is a core component of Hibernate?
A – Transaction
B – SessionFactory
C – Session
D - All of the above

41 - 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.

42 - What is Query level cache in hibernate?

A - The query-level cache is cache for query resultsets 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.

43 - 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.

44 - Which of the following database is not supported by Hibernate?

A - Oracle

B - Microsoft SQL Server Database

C - FoundationDB

D – Informix Dynamic Server

45 - Session a thread-safe object.

A - true

B - false

46 - 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.

47 - Which of the following is true about persistent state of a persistent entity?

A - You can make a transient instance persistent by associating it with a Session.

B - A persistent instance has a representation in the database.

C - A persistent instance has an identifier value.

D - All of the above.

48 - 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.

49.   Is it necessary to use hibernate.cfg.xml for configuration in hibernate?
a.   Yes
b.   No

50.   While creating SessionFactory in hibernate, which design pattern should be adopted?
a.   Singleton
b.   Prototype

51.   Session is created per thread in hibernate?
a.   True
b.   False

52.   Persistent objects and collections in hibernate are
a.   Short-lived, single threaded objects
b.   Long-lived, multi threaded objects

53.   Transient and detached objects in hibernate are
a.   Instances of persistent class that are not currently associated with session.
b.   Instances of persistent class which are in session.

54.   org.hibernate.Transaction object is short-lived single threaded in hibernate.
a.   False
b.   True

55.   org.hibernate.cfg.Configuration can be used for all configuration and no need of XML.
a.   False
b.   True

56.   Which property are used to configure diver class in hibernate?
a.   hibernate.connection.driver_class
b.   hibernate.connection.datasource

57.   Which property is used to determine the JDBC fetch size?
a.   hibernate.jdbc.fetch_size

b.   hibernate.jdbc.batch_size

58.   Which property is used to enable auto commit for JDBC pooled connections?
a.   hibernate.hbm2ddl.auto
b.   hibernate.connection.autocommit

59   Hibernate uses PersisterClassProvider by default.
a.   False
b.   True

60.   All the POJO must implement non-argument constructor in hibernate.
a.   True
b.   False

61. The non-argument constructor in POJO must be public in hibernate.
a.   True
b.   False

62. For lazy loading classes should be non-final in hibernate?
a.   True
b.   False

63.   To put instances of persistent class in a Set, override hashCode() and equals().
a.   True
b.   False

64.   EntityTuplizer in hibernate is used to mange contracts for
a.   Component
b.   Entity

65. When to use Optimistic locking in hibernate?
a.   For long transactions
b.   For short transactions

66.   Which annotation is used to achieve optimistic locking in hibernate?
a.   @Version
b.   @Lock

67.   What is the default annotation for a property in hibernate?
a.   @Transient
b.   @Basic

68.   If @Id is annotated at getter method, then which one is true?
a.   Only getter method is persisted.

b.   Property is also persisted.

69.   Can embeddable class be used as primary key?
a.   Yes
b.   No

70.   If a single table hosts all the instances of a class hierarchy, then it is known as
a.   Joined subclass strategy
b.   Single table per class hierarchy strategy

71.   How to inherit properties from superclasses in hibernate?
a.   @MappedSuperclass
b.   @MappedSubclass

72.   How to override attributes from embeddable class in hibernate?
a.   Using @AttributeOverride
b.   Using @AssociationOverride

73.   If entity is not annotated with @Table, what will happen?
a.   Throws error because no table name is assigned.
b.   No error and class name is mapped with table name.

74.   When several entities points to the target entity,that is achieved by
a.   @ManyToOne
b.   @OneToOne

75.   To persist collections of embeddable type, hibernates uses
a.   @OneToMany
b.   @ElementCollection

76.   In hibernate @OrderBy makes a list as
a.   Ordered
b.   Indexed

77.   To map an enum in hibernate, we use
a.   @MapKeyEnumerated
b.   @MapKey

78.   To map a date in hibernate, we use
a.   @MapKey
b.   @MapKeyTemporal

79. In which level, sql query is integrated in HQL?
a. class level

b. low level
c. high level
d. object level

80. you would need one sessionfactory obj per database using a seperate config file
a. True
b. False

81. Hibernate helps in mapping of java objects with database tables
a. True
b. False

82. Cache enables the database to hit as much as possible for better performance in critical applications.
a. True
b. False

83. Named queries are created via which level of annotations on entities
a. high level
b. all level
c. class level
d. low level

84. what does hibernate batch update and delete do?
a. data is modified in class
b. data is modified directly in db
c. data is modified in controller
d. data is modified in jsp

1. Describe Global and Local transactions in Spring? (Definitions)
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.

2. What is the role of TransactionDefinition interface?
a. Isolation
b. Propagation
c. Timeout
d. Read-only status
e. All the above
3: How can we roll back a declarative transaction?
Ans: We can use rollback-for and no-rollback-for attributes with transactional definition.

4: How many types of isolation are there? (Definitions)
Ans: We have 5 types of Isolation
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.

5: How many types of Propagation are there? (Definitions)
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 exits.
d. PROPAGATION_NOT_SUPPORTED: runs non -transactionaly 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 exits any.
g. PROPAGATION_SUPPORTS: runs current transaction and runs non -transactionaly

6: Which of the following are JSR - 250 annotation/s?
a. @Resource
b. @PostConstruct
c. @Autowired
d. @PreDestroy
e. @Controller

7: 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

8: Can dependency injection be lazy initialized?
a. YES
b. NO

9. In Spring's form tag library which of the following tags are valid?
a. input and inputs

10. 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.

11. 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.

12. 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.

13. 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.

14. The default scope of bean is 'singleton'
a. TRUE
b. FALSE

15. Can you instantiate a static inner class in Spring?
a. No, static classes are not supported
b. Yes, they are instiantiated by default with the class.
c. Yes, But you will have to use binary name of the class.

16. An application server is required for spring's transaction mechanism to run.
a. TRUE
b. FALSE

17. 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

18. @Inject annotation supports "required" attribute.
a. TRUE
b. FALSE

19. Which event is published when context is initialized?
a. ContextStartedEvent
b. ContextRefreshedEvent
c. ContextInitializedEvent
d. ContextReadyEvent

20. Which event is published when context is refreshed?
a. ContextStartedEvent
b. ContextInitializedEvent
c. ContextReadyEvent
d. ContextRefreshedEvent

21. Spring event mechanism is based on the standard:-
a. Observer Design Pattern
b. Factory Design Pattern
c. Mediator Design Pattern

22. 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 as well as application servers

23. In Spring Framework's declarative transaction implementation, is it sufficient to annotate to classes with the @Transactional annotation?
a. YES
b. NO   *(Note: <tx:annotation-driven> has to be added in configuration file.)*

24. 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.

25. The available prefixes for ClassPathXmlApplicationContext look up are:-
a. classpath:
b. file:
c. http:

d. https:

26. 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?
a. TRUE
b. FALSE

27. If you were using Join Points, Pointcuts & Advice, What would you be using?
a. Bean Container
b. JPA
c. EJB
d. AOP

28. Spring 3.0 does not support for multipart form.
a. TRUE
b. FALSE

29. Which of the following view technologies are supported by spring?
a. JSTL/JSP
b. Ms Excel
c. Adobe PDF
d. All of the above.

30. 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

31. Spring 3.0 provides the PropertyEditor for performing thread-safe type conversion.
This allows any Type to be converted to any other Type.
a. TRUE
b. FALSE

32. 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 has file that contains XML configuration metadata for ApplicationContext of given DispatcherServlet?
a. /WEB-INF/application-context.xml
b. /dispatcher-servlet.xml
c. /WEB-INF/dispatcher-servlet.xml

33. 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

34. The following methods--
a. queryForInt(args)
b. queryForList(args)
c. getJdbcOperations()
d. getNamedParameterJdbsOperations()
                                --all present in which of the following class, provided in

options below?

a. SimpleJdbcTemplate

b. JdbcTemplate
c. NamedParameterJdbcTemplate
d. None of the above

35. The dynamic languages currently supported by spring are?
a. Groovy
b. JRuby
c. BeanShell
d. All the above

36. JMS stands for-
a. Java Message Service
b. Java Mechanism Service
c. Java Message System
d. Java MultiThreaded System

37. 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/>

38. Programatic transaction management is done using:-
a. TransactionTemplate
b. PlatformTransactionManager
c. @TransactionManager
d. IntegratedTranaction

39. Which of the following is the correct way to use @Transactional annotation in spring?
a. @Service
class OrganizationService{
    @Transactional(readOnly = false)
    public void saveData(Employee emp){
    }
}

b. @Service
class OrganizationService{
    @Transactional(readOnly = true)
    public void getData(Employee emp){
    }
}

c. @Service

```
class OrganizationService{
    @Transactional
    public void saveData(Employee emp){
    }
}
```

d. @Service
```
class OrganizationService{
    @Transactional = readOnly(false)
    public void saveData(Employee emp){
    }
}
```

e. @Service
```
class OrganizationService{
    @Transactional = readOnly(true)
    public void saveData(Employee emp){
    }
}
```

40. 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

41. Which of the following 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

42. 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

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

a. true
b. false

44. Spring's various Controllers inherit from AbstractControllor
a. true
b. false

45. You can write your own controller by using handleRequestInternal(HttpServletRequest, HttpServletResponse) method from abstract controller and a ModelAndView object.
a. true
b. false

46. Which of the following controllers 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

47. Which statements are true about DispatcherServlet?
a. DispatcherServlet is an expression of the "Front Controller" design pattern
b. The DispatcherServlet is the actual Servlet
c. DispatcherServlet is declared in the web.xml of your web application.
d. The Spring DispatcherServlet has a couple of special beans it uses in order to be able to process requests and render the appropriate views. These beans can be configured in WebApplicationContext.
e. All the above

48. Which statements are true about WebApplicationContext?
a. The WebApplicationContext is an extension of the plain ApplicationContext
b. The WebApplicationContext is bound in the ServletContext, and by using static methods on the RequestContextUtils class.
c. WebApplicationContext differs from a normal ApplicationContext in that it is capable of resolving themes
d. We can get WebApplicationContext reference by using ApplicationContext .
e. All the above

49. Which of the following controller combines multiple request-handling methods into one controller?
a. UrlFilenameViewController
b. MultiActionController
c. CommandController
d. MultiRequestController

50. Which of the following are correct statements?
a. Form Controllers handle form interaction
b. Multipart resolver to handle file uploads
c. Dynamic binding of data to domain model
d. Interaction with velocity,jsp, thymeleaf,pdf, Excel
e. Sending email remote accessing via Soap,Burlap

51. What do you mean by 'Bean'?
a. component
b. object
c. class
d. container
e. xml file

52. @RequestParam is useful for binding query parameters to method parameters where the names don't match.
a. true
b. false

53. What are responsibilities included for bean factory?
a. Instantiating or sourcing application objects
b. configuring such objects
c. Assembling the dependencies between these objects
d. Manage lifecycle of spring
e. All the above
54. What are the responsibilities of XmlBeanFactory included?
a. This implementation allows you to express the objects that compose your application
b. Resolve inter-dependencies between such objects, in terms of XML
c. The XmlBeanFactory takes the XML configuration metadata and uses it to create a fully configured system or application
d. None of these

55. What are the correct ways to instantiate bean?
a. Using default (empty) constructor
b. Instantiation using a static factory method
c. Instantiation using an instance factory method
d. Using the container
e. All these above are true
56. Which statements are true about IOC (Inversion of Control)?
a. Decoupling of the execution of a certain task from implementation.
b. Each module can focus on what it is designed for.
c. Replacing modules should not affect to other modules.
d. Modules should observe about what other systems do.

e. All the above

57. What do you mean by inner bean?

a. A <bean/> element inside the <bean/> elements is used to define a so-called inner bean.

b. A <bean/> element inside the <property/> elements is used to define a so-called inner bean.

c. A <bean/> element inside the <constructor-arg/> elements is used to define a so-called inner bean.

d. A <bean/> element inside the <property/> or <constructor-arg/> elements is used to define a so-called inner bean.

58. 1. Can we use index and type attribute together?

a. Yes

b. No

59. Which of the following is not a module in Spring Framework?

a. DAO

b. ORM

c. MVC

d. AOP

e. IOC

f. JEE

g. None of these

60. Which of the following statement is false?

a. The Core package is the most fundamental part of the framework and provides the IoC and Dependency Injection features

b. The DAO package provides a JDBC-abstraction layer that removes the need to do tedious JDBC coding and parsing of database-vendor specific error code

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

d. AOP takes out the direct dependency of crosscutting tasks from classes which, we can achieve through normal object oriented programming model, for example, method-interceptors and point cuts to cleanly decouple code implementing that functionality

e. Spring's Web package provides basic web-oriented integration features, such as multipart file-upload functionality

f. Spring's MVC package provides a Model-View-Controller implementation for web-application MVC package provides a Model-View-Controller implementation for web-application

g. None of the above options

61. Which of the following is false?

a. A BeanFactory pretty much just instantiates and configures beans.

b. An ApplicationContext also instantiates bean, and it provides the supporting infrastructure to enable lots of enterprise-specific features such as transactions and AOP, message resource handling (for use in internationalization), event propagation.

c. Application-layer specific contexts such as the WebApplicationContext use in web application

62. A bean is simply an object that is instantiated, assembled and otherwise managed by a Spring IoC container.
a. True
b. False

63. Which of the following is actual representation of the Spring IoC container?
a. ApplicationContext
b. XmlBeanFactory
c. BeanFactory
d. WebApplicationContext

64. How container load configuration metadata from a variety of external resources such as the local file system from the Java CLASSPATH?
a. ApplicationContext constructor
b. Init()
c. Context constructor
d. XmlClassPath constructor

65. Which of following is correct way to load bean definitions from another file?
a. <bean id="bean1" class="..." import="something.xml"/>
b. <resources name="something.xml" import ="true"/>
c. <import resource="something.xml"/>
d. All the above

66. package com.bullraider;
public class TestBean {
private int year;
private String happy;
public TestBean(String happy,int year) {
this.year = year;
this.happy = happy;
}
}
What is the correct way to write constructor injection?
(Select valid options)

a.
<bean name="testClass" class="com.bullraider.TestBean">
<constructor-arg type="java.lang.String" value="Happy new year"/>
<constructor-arg type="int" value="2015"/>
</bean>
b.

```
<bean name="testClass" class="com.bullraider.TestBean">
<constructor-arg index="0" value="Happy new year"/>
<constructor-arg index="1" value="2015"/>
c.
</bean>
<bean name="testClass" class="com.bullraider.TestBean">
<constructor-arg index="1" value="Happy new year"/>
<constructor-arg index="0" value="2015"/>
</bean>
d.
<bean name="testClass" class="com.bullraider.TestBean">
<constructor-arg type="int" value="2015"/>
<constructor-arg type="java.lang.String" value="Happy new year"/>
</bean>
```
e. All the above

67. What do you mean by inner bean?
(Select valid options)
a. A <bean/> element inside the <bean/> elements is used to define a so-called inner bean.
b. A <bean/> element inside the <property/> elements is used to define a so-called inner bean.
c. A <bean/> element inside the <constructor-arg/> elements is used to define a so-called inner bean.
d. A <bean/> element inside the <property/> or <constructor-arg/> elements is used to define a so-called inner bean.

68. Which of the following are correct statements?
(Select valid options)
a. Form Controllers handle form interaction
b. Multipart resolver to handle file uploads
c. Dynamic binding of data to domain model
d. Interaction with velocity,jsp, thymeleaf,pdf, Excel
e. Sending email remote accessing via Soap,Burlap

69. What are responsibilities included for bean factory?
(Select valid options)
a. Instantiating or sourcing application objects
b. configuring such objects
c. Assembling the dependencies between these objects
d. Manage lifecycle of spring
e. All the above

70. What are the responsibilities of XmlBeanFactory included?
(Select valid options)
a. This implementation allows you to express the objects that compose your application

b. Resolve inter-dependencies between such objects, in terms of XML
c. The XmlBeanFactory takes this XML configuration metadata and uses it to create a fully configured system or application
d. None of these

71. Which statements are true about IOC (Inversion of Control)?
(Select valid options)
a. Decoupling of the execution of a certain task from implementation.
b. Each module can focus on what it is designed for.
c. Replacing modules should not affect to other modules.
d. Modules should observe about what other systems do.
e. All the above

72. Which of the following are the correct way to instantiating a Spring IOC container?
(Select valid options)
a. ApplicationContext context = new ClassPathXmlApplicationContext(new String[] {"beans-definitions.xml"})
BeanFactory factory = context;
b. XmlBeanFactory beanFactory=new XmlBeanFactory(new ClassPathResource("beans-definitions.xml"));
c. BeanFactory fac=new ClassPathXmlApplicationContext("beans-definitions.xml");
d. Resource res=new Classpathresource("beans-definitions.xml");
BeanFactory fac=new XmlBeanFactory(res);

73. What are the correct ways to instantiate bean? (Select valid options)
a. Using default (empty) constructor
b. Instantiation using a static factory method
c. Instantiation using an instance factory method
d. Using the container
e. All these above are true

74. What are the metadata Bean Definition objects contain?

a. class name
b. scope
c. constructor arguments
d. properties
e. autowiring mode
f. dependency checking mode
g. lazy-initialization mode
h. initialization method
i. destruction method
j. all the above

75. What is Bean Factory? (Select appropriate options)
a. A BeanFactory is essentially maintains a registry of different beans and their dependencies.
b. A BeanFactory enables you to read bean definitions and access them using the bean factory.
c. Using just the BeanFactory we can create and read in some bean definitions in the XML format as following
    Resource definition1 = new FileSystemResource("beans-def.xml");
    BeanFactory factory = new XmlBeanFactory(definition1)
d. We can get ApplicationContext and WebApplicationContext object using BeanFactory

76. Which statements are true about DI(Dependency Injection) ? (Select valid options)
a. DI says your components and services should be tightly coupled in code
b. DI says that no need create your objects but describe how they should be created.
c. We should not directly connect your components and services together in code but describe which services are needed by which components in a configuration file
d. Inversion of control relies on dependency injection

77. Which of the following are basic techniques to implement inversion of control?
a. using a factory pattern
b. using a service locator pattern
c. a constructor injection
d. a setter injection
e. an interface injection
f. all the above

78. Which of the following statements are false?
a. Constructor-based DI is effected by invoking a constructor with a number of arguments, each representing a dependency
b. We can aslo use @Autowire annotation on constructor for constructor based autowiring.
c. Constructor-based DI is accomplished when the container invokes a class constructor with a number of arguments
d. Constructor-based DI is effected by invoking Setter Injection each representing a dependency

79. What are the correct ways to define constructor injection? (Select appropriate options)
a.
<bean id="salute" class="com.bullraider.app.beans.Salutation">
<constructor-arg>
<value>Salute</value>
</constructor-arg>
</bean>
b.
<bean id="salute" class="com.bullraider.app.beans.Salutation">
<constructor-arg value="Salute">
</constructor-arg>
</bean>

c.
```
<bean id="salute" class="com.bullraider.app.beans.Salutation">
<constructor-arg value="Slute"/>
</bean>
```
d. All the above

80.
```
public class Wheel{ public Wheel(){  System.out.println("wheel");}}
public class Car
{
  private Wheel wheelObj=null;
  public void setWeelObj(Wheel wheel){   this.wheelObj=wheel; }
  public Wheel getWeelObj(){return wheelObj;  }
}
```

What are the correct ways to write setter injection?
a.
```
<bean id="wheelBean" class="com.bullraider.Wheel"/>
<bean id="carBean" name="car" class="com.bullraider.Car">
<property name="wheelObj"><ref bean="wheelBean"/></property>
</bean>
```
b.
```
<bean id="wheelBean" class="com.bullraider.Wheel"/>
<bean id="carBean" name="car" class="com.bullraider.Car">
<property name="wheelObj" value="wheel"/>
</property>
</bean>
```
c.
```
<bean id="wheelBean" class="com.bullraider.Wheel"/>
<bean id="carBean" name="car" class="com.bullraider.Car">
<property name="wheelObj">
<idref bean="wheelBean"/>
</property>
</bean>
```
d.
```
<bean id="wheelBean" class="com.bullraider.Wheel"/>
<bean id="carBean" name="car" class="com.bullraider.Car">
<property name="wheelObj" ref bean="wheelBean"/>
</property>
</bean>
```

81. 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

82. 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 the above.

83. 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.

84 - 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.

85 - 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.

86 - 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.

87 - 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.

88 - Can we integrate Struts with Spring?
A - Yes

B - No

89 - If a bean can be created any number of times, scope is
A - session
B - global-session
C - prototype
D - request

90 - 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.

91 - Which of the following is correct assertion about spring?
A - Spring enables developers to develop enterprise-class applications using POJOs.
B - Spring is organized in a modular fashion.
C - Testing an application written with spring is simple because environment-dependent code is moved into this framework.
D - All of above.

92 - 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 the above.

93 - 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.

94 - 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.

95 - 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.

96 - 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.

97 - Which of the following is part of Data Access layer in Spring framework?
A - Beans
B - Aspects
C - JMS
D - Context

98 - SpEL is part of core container.
A - False
B - True

99 - Which class is used to map a database row to a java object in spring?
A - ResultSet
B - RowMapper
C - RowSetMapper
D - ResultSetMapper

100 - Following class can be extended to create custom event in spring.
A - SpringEvent
B - Event
C - ApplicationEvent
D - None of above

101 - 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

102 - Which are the IoC containers in Spring?
A - BeanFactory, ApplicationContext
B - BeanFactory, ApplicationContext, IocContextFactory
C - BeanFactory, BeanContext, IocContextFactory
D - BeanFactory, ApplicationContext, BeanContext

103 - What is true about <list> 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.

104 - What is byName 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 - Similar to byType, but type applies to constructor arguments.

105 - 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.

106 - 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.

107 - 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.

108 - 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.

109 - 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.

110 - Which of the following class can be used to execute Sql queries in spring?
B - JDBCHelper
A - JdbcTemplate
C - DBHelper
D - DBTemplate

111 - How to handle shut down of IoC container?
A - Using shutdownHook()
B - Using shutdownHandler()
C - Using registerHook()
D - Using registerShutdownHook()

112 - 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.

113 - Which of the following class can be used to call Stored Procedures in spring?
A - SPHelper
B - JdbcTemplateCall
C - JdbcTemplate
D - SimpleJdbcCall

114 - What is the scope of stateless bean?
A - global-session
B - singleton
C - prototype
D - request

115 - What is the scope of stateful bean?
A - session
B - global-session
C - prototype
D - request

116 - Can be bean be configured to have an inner bean?
A - True
B - False

117 - 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.

118 - 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.

119 - 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

120.

```
// Wheel.java
package com.bullraider
public class Wheel{ public Wheel(){System.out.println("wheel");}}

// Car.java
package com.bullraider
public class Car
{
private Wheel wheelObj=null;
public Car(Wheel wheelObj){ this.wheelObj=wheelObj;}
public void setWheelObj(Wheel wheel){this.wheelObj=wheel; }
public Wheel getWheelObj(){return wheelObj;}
}
```

In the above example, what are correct ways to write inner bean? (Choose appropriate options)
a.
```
<bean id="wheelBean" class="com.bullraider.Car">
<constructor-arg>
<bean name="wheel" class="com.bullraider.Wheel">
<property name="wheelObj" value="wheel"/>
```

```
</bean>
</constructor-arg>
</bean>
b.
<bean id="wheelBean" class="com.bullraider.Car">
<bean id="carBean" name="car" class="com.bullraider.Wheel">
<property name="wheelObj" value="wheel"/>
</bean>
</bean>
c.
<bean id="wheelBean" class="com.bullraider.Car">
<property name="wheel">
<bean name="wheel" class="com.bullraider.Wheel">
<property name="wheelObj" value="wheel"/>
</bean>
</property>
</bean>
d.
<bean id="wheelBean" class="com.bullraider.Wheel"/>
<bean id="carBean" name="car" class="com.bullraider.Car">
<property name="wheelObj" value="wheelBean"/>
</property>
</bean>
```

121. Which of the following controller provide a way to interact with data objects and dynamically bind parameters from the HttpServletRequest to the data object specified?
a. MultiActionController
b. AbstractController
c. FormActionControllor
d. CommandController

122. Which of the following is not a view resolver?
a. BeanNameViewResolver
b. VelocityViewResolver
c. JasperReportsViewResolver
d. UrlBasedViewResolver
e. ResourceBundleViewResolver
f. None of the Above

123. 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"*/>

1. The first declared bean MyServiceImpl is missing an id must be named myService
2. The second declared bean JpaDao is missing an id must be named jpaDao
3. Answers 1 and 2 are both rights
4. Answers 1 and 2 are both wrong

124. Given the Spring configuration file, which are the correct statements?
<bean class=*"com.spring.service.BankServiceImpl"*
p:bankName=*"NationalBank"*>
</bean>

1. The p namespace has to be declared
2. Bean id is bankServiceImpl
3. The BankServiceImpl references a NationalBank bean
4. NationalBank is a scalar value

125. What the name of the bean defined in the following configuration class? Select a single answer.
@Configuration
public class ApplicationConfig {
@Autowired
private DataSource dataSource;
@Bean
ClientRepository clientRepository() {
ClientRepository accountRepository = new JpaClientRepository();
accountRepository.setDataSource(dataSource);
return accountRepository;
}
}
1. JpaClientRepository
2. jpaClientRepository
3. clientRepository
4. Two beans are defined: a data souce and a repository

126. How could you externalize constants from a spring configuration file or a spring annotation into a *.properties* file? Select one or more answers
1. By using the <util:constant /> tag
2. By declaring the ConstantPlaceholderConfigurer bean post processor
3. By using the <context:property-placeholder /> tag
4. By using the c: namespace

127. What statement is not correct in live environment? Select a unique answer.
1. Constuctor and properties autowiring in the same bean are not compatible

2. A bean should have a default or a no-args constructor
3. The <constructor-arg> tag could take type, name and index to reduce ambiguity
4. None of the above
5. All of the above

128. What are the right affirmations about the @PostConstruct, @Resource and the @PreDestroy
annotations?
1. Those annotations are specified in the JSR-250
2. The Spring Framework embedded those annotations
3. The <context:component-scan> tag enable them
4. The <context:annotation-config > tag enable them
5. Declaring the CommonAnnotationBeanPostProcessor enable them

129. What is/are typically case(s) where you usually need to manually instantiated an
ApplicationContext?
1. In a web application
2. In an integration test running with the SpringJUnit4ClassRunner
3. In a standalone application started with a main method
4. None of the above

130. 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");
1. The classpath: prefix could be omitted
2. Package name using the dot character is not well formatted
3. The slash character preceding com.example could be omit
4. All of the above
5. None of the above

131. How to auto-inject into a field a spring bean by its name? Select one or more answer
choices.
1. With the name attribute of the @Autowired annotation
2. By using the single @Qualifier annotation
3. By using both the @Autowired and the @Qualifier Spring annotations
4. By using the @Autowired annotation and naming the field with the bean name

132. What are the main advantages of using interfaces when designing business services?
Select one or more answer choices.
1. Mocking or stubbing the service
2. Be able to use the Spring auto-injection
3. Can do dependency checking
4. Loosely coupled code

133. 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

134. Given the following configuration class, what are the correct affirmations? Select one or more
answers.
public class ApplicationConfig {
private DataSource dataSource;
@Autowired
public ApplicationConfig(DataSource dataSource) {
this.dataSource = dataSource;
}
@Bean(name="clientRepository")
ClientRepository jpaClientRepository() {
return new JpaClientRepository();
}
}
1. @Configuration annotation is missing
2. Default or no-arg constructor is missing
3. @Bean name is ambiguous
4. @Bean scope is prototype

135. 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

136. Select one or more correct statements about developing integration test with Spring support.
1. A new Spring context is created for each test class
2. To get a reference on the bean you want to test, you have to call the getBean() method of the Spring context
3. Spring context configuration could be inherited from the super class
4. The Spring context configuration file has to be provided to the @ContextConfiguration annotation

137. What are the main advantage(s) for using Spring when writing integration tests?
1. Reuse Spring configuration files of the application
2. Create mock or stub
3. Be able to use the rollback after the test pattern
4. Use dependency injection

138. What are the main advantage(s) for using Spring when writing unit tests?
1. Reuse Spring configuration files of the application
2. Use dependency injection
3. Provide some mocks for servlet classes
4. All of the above
5. None of the above

139. What is right about the Spring test module?
1. It provides an abstraction layer for the main open source mock frameworks
2. Provides the @Mock annotation
3. It dynamically generates mock objects
4. All of the above
5. None of the above

140. 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

141. Considering 2 classes AccountServiceImpl and ClientServiceImpl. Any of these 2 classes inherits from
each other. What is the result of the following pointcut expression?
execution(* *..AccountServiceImpl.update(..))
&& execution(* *..ClientServiceImpl.update(..))
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

142. 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 their visibility
2. All methods, except private method
3. Protected and public methods
4. Public methods

143. 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

144. 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

145. 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

146. 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

147. What is a pointcut? Select the single 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

148. 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

149. What are the unique right answer about Spring AOP support?
1. An advice could proxied a constructor's class
2. A pointcut 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

150. 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

151. 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

152. What data access technology is supported by the Spring framework? Select one or more answers.
1. JDBC
2. NoSQL
3. Hibernate
4. JPA

153. 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

154. 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

155. What configuration is supported by the LocalSessionFactoryBean which supports Hibernate 4 or
higher? 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

156. 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

157. 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
}
1. The add() method executes code in a new transaction
2. The add() method uses the transaction of the transferMoney() method
3. When calling the add() method, an exception is thrown
4. Other behavior

158. Does Spring provide programmatic transaction management? Select a unique answer.
1. Yes with the TransactionTemplate class
2. Yes with the TransactionService class
3. Yes using the @Transactional bean post processor
4. No

159. 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

160. What is the default rollback policy in transaction management?
1. Rollback for any Exception
2. Rollback for RuntimeException
3. Rollback for checked exceptions
4. Always commit

161. What could not return a Spring MVC controller? Select a single answer.
1. An absolute path to the view
2. A logical view name
3. A new JstlView
4. void
5. null value

162. 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

163. 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)

164. How could you secure MVC controller with Spring Security? Select a unique answer.
1. With the @Secured annotation
2. With the @RolesAllowed annotation
3. In a XML security configuration file
4. All of the above
5. None of the above

165. What are the possible mechanisms provided by Spring Security to store user details? Select one or
more correct answers.
1. Database
2. JAAS
3. LDAP
4. Properties file

166. What is right about Spring Security configuration and the security namespace? Select one or more
correct answers.
1. The access attribute of the intercept-url tag support both EL and constants together.
2. The patterns declared into the intercept-url tag are analyzed from up to bottom. Winning is the first that matches.
3. The patterns declared into the intercept-url tag use by default the java regex syntax.
4. Security rules may apply depending request parameter

167. Which of the following is true regarding the below Spring controller?
@RestController
public class OwnerController {
@RequestMapping(value = "/owner/{ownerId}", method = RequestMethod.*POST*)
@ResponseBody
public Owner findOwner(@PathVariable("ownerId") int ownerId) {
return new Owner();
}
}
1. RequestMethod.GET method is more accurate than POST
2. @PathVariable should be replaced with the @PathParam annotation
3. Returning the 201 HTTP status code is better
4. @ResponseBody could be removed

168. Which of the following statements is true regarding the @ResponseStatus annotation?
1. @ResponseStatus is detected on nested exceptions
2. The ExceptionHandlerExceptionResolver uses the @ResponseStatus annotation to map
exception to HTTP status code
3. A controller handler is annotated with the @ResponseStatus, the response status set by
RedirectView takes precedence over the annotation value.
4. The @ResponseStatus annotation can go on a @RequestMapping method or a @RestController
class or a business exception class.

169. Compared to monolithic application, what are the advantage(s) of microservices?
1. The base code is easy to understand
2. Imply a simple distributed system

3. Easier deployment
4. Fine-grained scaling

170. What Spring Cloud provides in a microservices architecture?
1. A Service Discovery implementation
2. A server for externalized configuration
3. A Dockerfile building an image that runs any Spring Boot application
4. Netflix OSS integration for Spring Boot

171. What provides Spring Boot?
1. Support for Jetty and Undertow as embedded containers
2. Java code generation
3. Auto-configuration of the Spring Framework and third libraries
4. Convenient dependency descriptors to load transitive dependencies
5. Support both Java-based and YAML for Spring application context configuration

172. What is the name of the default environment configuration file of Spring Boot?
1. configuration.spring
2. configuration.yml
3. configuration.xml
4. application.properties
5. application.json

173. What do you have to do even if you are using the RMI Spring Remoting support? Select one or more
correct answers.
1. Implements the Remote interface
2. Extends the RemoteObject class
3. Catching the RemoteException exception
4. Implements the Serializable interface

174. What is exact about the HttpInvokerServiceExporter? Select one or more correct answers.
1. Has to run into a HTPP server as Jetty
2. Could process both POST and GET requests
3. Could be used with any http client as Jakarta Commons HttpClient
4. Could consume SOAP http request

175. What is the method that is not provided by the JmsTemplate Spring class?
1. convertAndSend
2. onMessage
3. receiveAndConvert
4. setDefaultDestination

176. How could you implement a JMS Listener using the Spring JMS support? Select one or more correct
answers.
1. By implementing the javax.jms.MessageListener interface
2. By implementing the SessionAwareMessageListener interface provided by Spring
3. Without any code, only using the jms namespace provided by Spring
4. By writing a single POJO without parent class or interface

177. What is easier to do by using Spring JMS support? Select one or more correct answers.
1. Register any Spring bean as JMX MBean
2. Register an existing MBean with a MBeanServer
3. Accessing to remote MBean
4. Control the attributes and the operations of a Spring bean exposes as a MBean

178. What is the purpose of the @ManageResource annotation? Select a single answer.
1. Expose a bean's property (getter/setter) to JMX
2. Expose a bean's method to JMX
3. Identify a Spring bean as a JMX MBean
4. None of the above

1) how many layers r thr in hibe arch ?

ans:There are 4 layers in hibernate architecture java application layer, hibernate framework
layer, backhand api layer and database layer

2)what is true abt 'clean' maven life cycle ?
ans:It cleans up artifacts created by prior builds

3) named queries are created cia which level of annotations on entities ? optn : high level, all
level, class level, low level

ans: class levl

4)what are features of xml <context: namespace?

1)@autowired annotation enabling,
2)@transactional annotation scanning,
3)@aspect annotation detection enabling,
4)@component annotation scanning

ans: 1 and 4

5)xml schema based config is introduced in which version of spring?
ans: 2.0

6) how many bean scopes are specified in singleton by default?
7,6,none, 5
ans: none

7)what are right affirmations about the @postconstruct, @resource, @predestroy annotations
?

1) the spring framework embeded those annotation
2) the <context:annotation-config> tag enable them
3) those annotations are specified in jsr 250
4) the <context:component-scan> tag enable them

ans : 2,3,4

8) you would need one sessionfactory obj per database using a seperate config file . true/false ?

ans : true

9)which of the following interpret user input and transform it into a model that is represented
to the user by the view..
optns: controllers, none, webapplicationcontext, dispacther servlet

ans : controllers

9) tags generated by form tag lib are compliant with xhtml-1.0 strict specification and attendant
dtd.
true/false?

ans :true

10) which elements not supported by hql?optn: sub,where,having,select
ans : sub

11))default @transactional settings

ans :

12)which isnt viewResolver class amongst contentNegotiatingView, BeanNameViewResolver,externalReframeviewResolver and UrlbasedViewResolver

ans: external reframe vr

13) does sessionLocaleResolver interceptor detects if a special parameter is present in current Http req?
ans : no

1)
What are the common implementations of the ApplicationContext?
The three commonly used implementation of 'Application Context' are:
FileSystemXmlApplicationContext: This container loads the definitions of the beans from an XML file. Here you need to provide the full path of the XML bean configuration file to the constructor.
ClassPathXmlApplicationContext: This container loads the definitions of the beans from an XML file. Here you do not need to provide the full path of the XML file but you need to set CLASSPATH properly because this container will look bean configuration XML file in CLASSPATH.
WebXmlApplicationContext: This container loads the XML file with definitions of all beans from within a web application.
2)What is default scope of bean in Spring framework?
The default scope of bean is Singleton for Spring framework.
3)Spring has JSR-250 based annotations which include @PostConstruct, @PreDestroy and @Resource annotations.
@PostConstruct: This annotation can be used as an alternate of initialization callback.
@PreDestroy: This annotation can be used as an alternate of destruction callback.
@Resource : This annotation can be used on fields or setter methods. The @Resource annotation takes a 'name' attribute which will be interpreted as the bean name to be injected. You can say, it follows by-name autowiring semantics.

4)What are the types of the transaction management Spring supports?
Spring supports two types of transaction management:
Programmatic transaction management: This means that you have managed the transaction with the help of programming. That gives you extreme flexibility, but it is difficult to maintain.
Declarative transaction management: This means you separate transaction management from the business code. You only use annotations or XML based configuration to manage the transactions.
5)Which of the above transaction management type is preferable?

Declarative transaction management is preferable over programmatic transaction management though it is less flexible than programmatic transaction management, which allows you to control transactions through your code.

6)What are the ways to access Hibernate by using Spring?

There are two ways to access hibernate using spring:

Inversion of Control with a Hibernate Template and Callback.

Extending HibernateDAOSupport and Applying an AOP Interceptor node.

7)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

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 the above.

9)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.

 Show Answer

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.

Q 5 - 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.

Q 6 - 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

Q 7 - 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.

Q 8 - If a bean is created once per Ioc Container, scope is

A - singleton

B - global-session

C - prototype

D - request

Q 9 - 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

Q 10 - 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.

Show Answer

Q 1 - 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.

Show Answer

Q 2 - Which is the correct implementation class of BeanFactory?

A - XmlBeanFactory

B - ClassPathBeanFactory

C - FileSystemBeanFactory

D - AdvancedBeanFactory
 Show Answer
Q 3 - 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.
 Show Answer

Q 4 - 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.
Answer : D
Explanation
Add <context:annotation-config/> to bean configuration to turn on annotation wiring.
 Hide Answer
Q 5 - 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.
Answer : D
Explanation
Join point represents a point in your application where you can plug-in AOP aspect.
 Hide Answer
Q 6 - 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.
Answer : B
Explanation
before advice runs after a method execution only if method completes successfully.
 Show Answer
Q 7 - Which of the following database is not supported using jdbcTemplate?

A - MySql
B - PostgresSql
C - NoSql
D - Oracle
 Show Answer
Q 8 - What stands true for spring framework?
A - Spring framework is a light weight framework.
B - Spring framework is a heavy weight framework.
 Show Answer
Q 9 - 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.
Answer : A
Explanation
after advice runs after a method execution regardless of its outcome.
 Hide Answer

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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.
Answer : A
Explanation
Dependency injection helps in decoupling application objects from each other.
 Hide Answer
Q 2 - What is bean scope?
A - Bean scope forces Spring to produce a new bean instance as per the scope defined.
B - Bean scope defines the accessibility of bean in a java class.
C - Bean scope defines the accessibility of bean in a java package.
D - Bean scope defines the accessibility of bean in a web application.
Answer : A

Explanation

Bean scope instructs Spring Container to produce a new bean instance as per the scope defined.

 Show Answer

Q 3 - 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.

Answer : A

Explanation

Spring supports list, set, map or props tags to inject java collections.

 Show Answer

Q 4 - 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.

Answer : C

Explanation

@Required 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.

 Hide Answer

Q 5 - 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.

Answer : D

Explanation

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

 Show Answer

Q 6 - Which of the following aspect implementation spring supports?

A - XML Schema based aspect implementation

B - @AspectJ based aspect implementation

C - Both of above.

D - None of above.

Answer : C

Explanation

Spring supports both XML Schema based and @AspectJ based aspect implementation.

 Show Answer

Q 7 - Which of the following database is not supported using jdbcTemplate?

A - MySql

B - PostgresSql

C - NoSql

D - Oracle

Answer : C

Explanation

NoSql is not supported using jdbcTemplate.

 Hide Answer

Q 8 - Thread scoped bean is introduced in which version of spring framework.

A - 1.0

B - 2.0

C - 3.0

D - 4.0

Answer : C

Explanation

Thread scoped bean is introduced in 3.0 version of spring framework.

 Hide Answer

Q 9 - 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.

Answer : A

Explanation

after advice runs after a method execution regardless of its outcome.

 Show Answer

Q 10 - Following class can be extended to create custom event in spring.

A - SpringEvent

B - Event

C - ApplicationEvent

D - None of above

Q 1 - 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.

Answer : D

Explanation

All of the above statements are correct.

 Hide Answer

Q 2 - Which are the correct implementation classes of ApplicationContext?

A - FileSystemXmlApplicationContext, ClassPathXmlApplicationContext, WebXmlApplicationContext

B - FileSystemApplicationContext, ClassPathApplicationContext, WebApplicationContext

C - AdvancedApplicationContext, FileApplicationContext

D - FileSystemApplicationContext, ClassPathApplicationContext

Answer : A

Explanation

FileSystemXmlApplicationContext is the implementation class of ApplicationContext. Other mentioned classes do not exists.

 Hide Answer

Q 3 - 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.

Answer : C

Explanation

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

 Hide Answer

Q 4

Can you inject null and empty string values in Spring?

A - Yes

B - No

Answer : A

Explanation

null and empty string values can be injected in spring beans.

 Show Answer

Q 5 - 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.

Answer : D

Explanation

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

Show Answer

Q 6 - 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.](#)

Answer : B

Explanation

before advice runs before a method execution.

Show Answer

Q 7 - What is Spring MVC framework?

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

Answer : B

Explanation

The Spring web MVC framework provides model-view-controller architecture and ready components that can be used to develop flexible and loosely coupled web applications.

Hide Answer

Q 8 - By default a bean is lazily loaded.

A - True
B - False

Answer : B

Explanation

By default a bean is eagerly loaded.

Hide Answer

Q 9 - What is the scope of stateful bean?

A - session
B [- global-session](#)
C - prototype

D - request
Answer : C
Explanation
Stateful bean is of prototype scope.
 Show Answer
Q 10 - Which of the following class can be used to execute Sql queries in spring?
B - JDBCHelper
A - JdbcTemplate
C - DBHelper
D - DBTemplate
Answer : B
Explanation
JdbcTemplate class can be used to execute Sql queries in spring.

Sl. no.	Topic
1.	Advanced Topics
2.	Architecture and Project Setup
3.	Basic Mapping
4.	Bean Scopes Available in Spring
5.	Controllers
6.	Introduction & Architecture
7.	Introduction to Hibernate
8.	Mapping Relationship
9.	Querying
10.	Reading Properties Files in Spring
11.	Spring Annotation Configuration using XML
12.	Spring Configuration Using Java
13.	Spring XML Configurations
14.	Tags
15.	Validation
16.	Views

1-12-16

Abstract view resolver that caches views. Often views need preparation before they can be used; extending this view resolver provides caching.

What are the different autowire types?
Byname,byType,constructor and autodetect

Which exception class is related to all the exceptions that are thrown in spring applications?

DataAccessException

Controller in spring is ==an Interface==

IOC or Dependent Injection is ==a Design Pattern==

What are the types of Bean Injections?
Constructor and setter

How many types of Dynamic proxy is available in Spring?
JDK Dynamic proxy
CGLIB Dynamic proxy

Spring provides features
1.Resource management
2.Exception handling
3.Transaction participation
4.Resource unwrapping

Number of types of Injection methods in Spring?
Two

Types of proxy in Spring Framework?
1.Static
2.Dynamic

Spring MVC is a request based framework.
True

Question: 1 What one is not the right affirmations about the @PostConstruct, @Resource and the @PreDestroy annotations?

Your Answer: The Spring Framework embedded those annotation ✓

Correct Answer: The Spring Framework embedded those annotation

Description: None

Question: 2 What statement is not correct in live environment? Select a unique answer.

Your Answer: All of the above ✓

Correct Answer: All of the above

Description: 1. You may auto-wiring properties by constructor, setter or properties in the same bean
2. The <constructor-arg> tag helps to instanciated a bean without default or no-args constructor
3. The <constructor-arg> tag could take type and index to reduce ambiguity, but not name which requires debug symbols.

Question: 3 Given the Spring configuration file, which are the correct statements?
<bean class="com.spring.service.BankServiceImpl"
p:bankName="NationalBank">
</bean>

Your Answer: The p namespace has to be declared ✓

Correct Answer: The p namespace has to be declared

Description: None

Question: 4 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;
}
}

Your Answer: clientRepository ✔

Correct Answer: clientRepository

Description: The @Bean annotation defines a String bean with the id clientRepository. JpaClientRepository is the implementation class of the bean. The data source is injected and is not declared in this class.

Question: 5 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"/>

Your Answer: The second declared bean JpaDao is missing an id must be named jpaDao ✔

Correct Answer: The second declared bean JpaDao is missing an id must be named jpaDao

Question: 6 How to auto-inject into a field a bean by its name? Select one or more response.

Your Answer: By using both the @Autowired and the @Qualifier spring annotations ✓

Correct Answer: By using both the @Autowired and the @Qualifier spring annotations

Description: None

Question: 7 What are the main advantages of using interfaces when designing business services? Select answer.

Your Answer: Mocking or stubbing the service ✓

Correct Answer: Mocking or stubbing the service

Description: 1. With modern mock API like Mockito or EasyMock, interfaces are not mandatory for mocking or stubbing the service. But using interface remains easier when you have to manually mock the service in unit test.
2. Auto-injection is possible with class. Spring uses CGLIB.
3. Dependency checking is an advantage of dependencies injection.

Question: 8 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");

Your Answer: All of the above ✓

Correct Answer: All of the above

Description: 1. When using the ClassPathXmlApplicationContext, the classpath: prefix is default one so you could omit it
2. In a Spring location resource, package separator is a slash and not a dot. Thus the com/example/myapp/config.xml syntax has to be used.
3. ClassPathXmlApplicationContext starts looking from root of the classpath regardless of whether specify "/"

could omit it

2. In a Spring location resource, package separator is a slash and not a dot. Thus the com/example/myapp/config.xml syntax has to be used.

3. ClassPathXmlApplicationContext starts looking from root of the classpath regardless of whether specify "/"

Question: 9 How could you externalize constants from a Spring configuration file or a Spring annotation into a .properties file? Select one or more answers

Your Answer: By using the context:property-placeholder tag ✔

Correct Answer: By using the context:property-placeholder tag

Description: 1. The <util:constant static-field="constant name"/> tag enables to reference a Java constant or enumeration into a spring configuration file

2. ConstantPlaceholderConfigurer does not exist. You may think about the PropertyPlaceholderConfigurer bean post processor.

3. The <context:property-placeholder location="file:/myApp.properties" /> tag activates the replacement of ${...} placeholders, resolved against the specified properties file.

4. The c: namespace is for simplifying constructor syntax (since Spring 3.1) and don´t provide such feature.

Question: 10 What is/are typically case(s) where you usually need to manually instanciated an ApplicationContext?

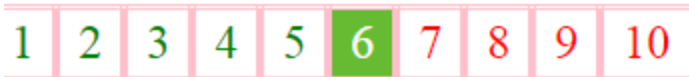**Your Answer:** In a standalone application started with a main method ✔

Correct Answer: In a standalone application started with a main method

Description: 1. In a web application, the ContextLoaderListener is in charge to create an WebApplicationContext.

2. In an integration test based on Spring, the SpringJUnit4ClassRunner creates the application context for you. The @ContextConfiguration annotation allows to specified application context configuration files.

3. In a main method, you have to instanciated a class implementing the ApplicationContext interface (examples:

Question 6: What statement is not correct in live environment? Select a unique answer.

.. ○ Constuctor and properties autowiring in the same bean are not compatible

!. ○ A bean should have a default or a no-args constructor

i. ○ The constructor-arg tag could take type, name and index to reduce ambiguity

!. ● All of the above

Next

Question: 1 Select correct statement about transactional support of the spring test module.

Your Answer: Transaction manager could be set within the @TransactionConfiguration annotation ✓

Correct Answer: Transaction manager could be set within the @TransactionConfiguration annotation

Description: None

Question: 2 Select one correct answer about spring bean life cycle.

Your Answer: The method annotated with @PostConstruct is called before before the afterPropertiesSet callback method of the InitializingBean interface ✓

Correct Answer: The method annotated with @PostConstruct is called before before the afterPropertiesSet callback method of the InitializingBean interface

Description: 1. In the bean lifecycle, method annotated with @PostConstruct is called after the properties set step and the BeanPostProcessors#postProcessBeforeInitialization step
2. Destroy methods of prototype beans are never called
3. In the bean lifecycle, the afterPropertiesSet callback method of the InitializingBean is called after the method annotated with the @PostConstruct annotation and before the init-method declared in the XML configuration file.
4. In the bean lifecycle, the method annotated with the @PreDestroy annotation is called before the destroy callback of the DisposableBean interface and before the destroy-method declared in the XML configuration file.

Question: 3 Select correct statement about developing integration test with Spring support.

Your Answer: Spring context configuration could be inherits from the super class ✓

Correct Answer: Spring context configuration could be inherits from the super class

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Question 5: What is right about the spring test module?
1. ○ It provides an abstraction layer for the main open source mock frameworks
2. ○ Provides the @Mock annotation
3. ○ It dynamically generates mock objects
4. ◉ None of the above

Next

Question 10: What statement is not correct in live environment? Select a unique answer.

1. ○ Constuctor and properties autowiring in the same bean are not compatible
2. ○ A bean should have a default or a no-args constructor
3. ○ The constructor-arg tag could take type, name and index to reduce ambiguity
4. ◉ All of the above

Next

Question: 4 What are the main advantage(s) for using Spring when writing unit tests?

Your Answer: All of the above ✗

Correct Answer: Provide some mocks for servlet classes

Description: What are the main advantage(s) for using Spring when writing unit tests?
1. You don´t need Spring container to writer unit test
2. Refer to the answer number 1.
3. The org.springframework.mock package provides mock classes like MockHttpSession or MockHttpContext. They could be helpful for unit test in the presentation layer and when you don´t use any mock framework such as Mockity or EasyMock.

Question: 5 Which one is not correct about the advantages for using Spring when writing integration tests?

Your Answer: Create mock or stub ✓

Correct Answer: Create mock or stub

Description: Mocking or stubbing is more frequent in unit tests than in integration tests. And Spring does not provide any implementation or abstraction of mock framework.

Question: 6 What is right about the spring test module?

Your Answer: None of the above ✓

Correct Answer: None of the above

Description: None

Question: 7 What statement is not correct in live environment? Select a unique answer.

Your Answer: All of the above ✔

Correct Answer: All of the above

Description: None

Question: 8 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();
}
}
```

Your Answer: @Configuration annotation is missing ✔

Correct Answer: @Configuration annotation is missing

Description: 1. In order to be taken into account by Spring, the ApplicationConfig class has to be annotated with the @Configuration annotation

---

Question: 9 What are the features of the XML <context: namespace? Select correct option

Your Answer: @Autowired annotation enabling ✔

Correct Answer: @Autowired annotation enabling

Description: 1. Use <tx:annotation-driven /> to enable @Transactional annotation scanning
2. Use <aop:aspectj-autoproxy /> to enable detection of @Aspect bean
3. Turns on <context:annotation-config /> or <context:component-scan /> to enable @Autowiring annotation

---

Question: 10 What is/are typically case(s) where you usually need to manually instanciated an ApplicationContext?

Your Answer: In a standalone application started with a main method ✔

Correct Answer: In a standalone application started with a main method

Description: None

Q 1 - 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
Answer : A
Explanation
Beans, Core, Context, SpEL are the modules in core container.
 Hide Answer
Q 2 - 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 the above.
Answer : D
Explanation
All of the above statements are correct.
 Hide Answer
Q 3 - 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.
Answer : A
Explanation
global-session scope instructs Spring IoC container to create a instance per
HTTP application.
 Hide Answer
Q 4 - 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.
Answer : D
Explanation
Add <context:annotation-config/> to bean configuration to turn on
annotation wiring.
 Hide Answer
Q 5 - 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.
Answer : C

Explanation

RequestHandledEvent event is published when the HTTP session is initialized or refreshed.

 Hide Answer

Q 6 - Which of the following aspect implementation spring supports?

A - XML Schema based aspect implementation

B - @AspectJ based aspect implementation

C - Both of above.

D - None of above.

Answer : C

Explanation

Spring supports both XML Schema based and @AspectJ based aspect implementation.

 Hide Answer

Q 7 - Which of the following is part of Data Access layer in Spring framework?

A - Beans

B - Aspects

C - JMS

D - Context

Answer : C

Explanation

JMS is the part of Data Access layer in Spring framework.

 Hide Answer

Q 8 - Thread scoped bean is introduced in which version of spring framework.

A - 1.0

B - 2.0

C - 3.0

D - 4.0

Answer : C

Explanation

Thread scoped bean is introduced in 3.0 version of spring framework.

 Hide Answer

Q 9 - How to handle shut down of IoC container?

A - Using shutdownHook()

B - Using shutdownHandler()

C - Using registerHook()

D - Using registerShutdownHook()

Answer : D

Explanation

Using registerShutdownHook() method, shut down of IoC container can be handled. Other methods do not exists.

 Show Answer

Q 10 - 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.

Answer : B

Explanation

BeanPostProcessor defines callback methods that you can implement to provide your own instantiation logic, dependency-resolution logic etc.

As a rule, use the prototype scope for all state-full beans and the singleton scope for stateless beans.

Q 1 - 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.

Answer : A

Explanation

Dependency injection helps in decoupling application objects from each other.

 Hide Answer

Q 2 - 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.

Answer : D

Explanation

All of the above statements are correct.

 Hide Answer

Q 3 - 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.

Answer : A

Explanation

prototype scope allows Spring IoC container to create any number instances per IoC container.

 Hide Answer

Q 4 - 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.

Answer : C

Explanation

@Required 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.

 Show Answer

Q 5 - 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.

Answer : D

Explanation

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

 Hide Answer

Q 6 - 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.

Answer : B

Explanation

Target object is advised by one or more aspects. Target object will always be a proxy object, also referred to as the advised object.

 Hide Answer

Q 7 - 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.
Answer : C
Explanation
Hibernate can be accessed by both ways either using Inversion of Control with a Hibernate Template and Callback or extending HibernateDAOSupport and applying an AOP Interceptor node.
 Hide Answer
Q 8 - Which class acts as IoC Container?
A - ServletContext
B - DispatcherServlet
C - ApplicationContext
D - None of the above
Answer : C
Explanation
ApplicationContext class acts as IoC Container.
 Show Answer
Q 9 - What is the scope of stateless bean?
A - global-session
B - singleton
C - prototype
D - request
Answer : B
Explanation
Stateless bean is of singleton scope.
 Hide Answer
Q 10 - 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.
Answer : B
Explanation
BeanPostProcessor defines callback methods that you can implement to provide your own instantiation logic, dependency-resolution logic etc.
Q 1 - 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.
Answer : A
Explanation

Spring is an open source development framework for enterprise Java.
 Hide Answer
Q 2 - What is bean scope?
A - Bean scope forces Spring to produce a new bean instance as per the scope defined.
B - Bean scope defines the accessibility of bean in a java class.
C - Bean scope defines the accessibility of bean in a java package.
D - Bean scope defines the accessibility of bean in a web application.
Answer : A
Explanation
Bean scope instructs Spring Container to produce a new bean instance as per the scope defined.
 Hide Answer
Q 3 - What is true about <list> 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.
Answer : A
Explanation
<list> tag is used to wire a list of values, allowing duplicates.
 Hide Answer
Q 4 - 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.
Answer : D
Explanation
Add <context:annotation-config/> to bean configuration to turn on annotation wiring.
 Hide Answer
Q 5 - 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.
Answer : C
Explanation
RequestHandledEvent event is published when the HTTP session is initialized or refreshed.

Q 6 - 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

Answer : D

Explanation

Before, after, after-returning, after-throwing, around are the five types of advice that spring supports.

Q 7 - 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.

Answer : C

Explanation

Spring supports both Programmatic and Declarative transaction management.

Q 8 - SpEL is part of core container.

A - False

B - True

Answer : B

Explanation

SpEL is a part of core container.

Q 9 - Which class is used to map a database row to a java object in spring?

A - ResultSet

B - RowMapper

C - RowSetMapper

D - ResultSetMapper

Answer : B

Explanation

RowMapper class is used to map a database row to a java object in spring.

Q 10 - 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.

Answer : B

Explanation
BeanPostProcessor defines callback methods that you can implement to provide your own instantiation logic, dependency-resolution logic etc.

2-12-16 Razika given
Q 1 - 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
Answer : A
Explanation
JDBC, ORM, OXM, JMS, Transactions are the modules of Data Access/ Integration layer.
What is default scope of bean in Spring framework?
A - singleton
B - prototype
C - request
D - session
Q 5 - 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.
Answer : C
Explanation
RequestHandledEvent event is published when the HTTP session is initialized or refreshed.
Q 1 - 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
Answer : A
Explanation
Beans, Core, Context, SpEL are the modules in core container.
Q 5 - 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.

Answer : B

Explanation

Pointcut is a set of one or more joinpoints where an advice should be executed.

Q 8 - Can we integrate Struts with Spring.

A - Yes

B - No

Answer : A

Explanation

Struts can be integrated with spring.

Q 10 - Can bean be configured to have an inner bean?

A - True

B - False

Answer : A

Explanation

A bean can be configured to have an inner bean.

Q 4 - 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

 Show Answer

Q 5 - 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.

Answer : B

Explanation

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

Q 7 - 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.

Answer : A

Explanation

The @Controller annotation indicates that a particular class serves the role of a controller.

Q 8 - Which class acts as IoC Container?

A - ServletContext

B - DispatcherServlet

C - ApplicationContext

D - None of the above

Answer : C

Explanation

ApplicationContext class acts as IoC Container.

Q 9

A bean must have id attribute in beans configuration file.

A - True

B - False

Answer : B

Explanation

Id is not a mandatory attribute in beans configuration file.

Q 1 - Which of the following is correct assertion about spring?

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

B - Spring is organized in a modular fashion.

C - Testing an application written with spring is simple because environment-dependent code is moved into this framework.

D - All of above.

Answer : D

Explanation

Spring provides all above mentioned functionalities.

Q 2 - 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 the above.

Answer : D

Explanation

All of the above statements are correct.

Q 3 - 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.

Answer : A

Explanation

<props> tag is used to inject a collection of name-value pairs where name and value are both Strings.

Q 9 - What is the scope of stateless bean?

A - global-session

B - singleton

C - prototype

D - request

Answer : B

Explanation

Stateless bean is of singleton scope.

Q 10 - Which of the following class can be used to call Stored Procedures in spring?

A - SPHelper

B - JdbcTemplateCall

C - JdbcTemplate

D - SimpleJdbcCall

Answer : D

Explanation

SimpleJdbcCall class can be used to call Stored Procedures in spring.

Q 1 - What is Dependency Injection?

A - It is a design pattern which implements Inversion of Control for software applications.

B - It is one of the spring module.

C - It is a technique to get dependencies of any project.

D - It is used to promote tight coupling in code.

Answer : A

Explanation

Dependency Injection is a design pattern which implements Inversion of Control for software applications.

Q 2 - Which are the IoC containers in Spring?

A - BeanFactory, ApplicationContext

B - BeanFactory, ApplicationContext, IocContextFactory

C - BeanFactory, BeanContext, IocContextFactory

D - BeanFactory, ApplicationContext, BeanContext

Answer : A

Explanation

BeanFactory, ApplicationContext classes acts as IoC containers in Spring

Q 1 - 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

Answer : A

Explanation

Beans, Core, Context, SpEL are the modules in core container.

Hide Answer

Q 2 - 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 the above.

Answer : D

Explanation

All of the above statements are correct.

Hide Answer

Q 3 - What is request scope?

A - This scopes a bean definition to an HTTP request.

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

C - This scopes the bean definition to HTTP Session.

D - This scopes the bean definition HTTP Application/ Global session.

Answer : A

Explanation

request scope instructs Spring IoC container to create a instance per HTTP request.

Hide Answer

Q 4 - 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.

Answer : A

Explanation

Using Bean autowiring, Spring resolve collaborators (other beans) for your bean by inspecting the contents of the BeanFactory without using <constructor-arg> and <property> elements..

Show Answer

Q 5 - 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.

Answer : C

Explanation

RequestHandledEvent event is published when the HTTP session is initialized or refreshed.

Hide Answer

Q 6 - 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.

Answer : B

Explanation

before advice runs after a method execution only if method completes successfully.

Hide Answer

Q 7 - Which of the following database is not supported using jdbcTemplate?

A - MySql

B - PostgresSql

C - NoSql

D - Oracle

Answer : C

Explanation

NoSql is not supported using jdbcTemplate.

Hide Answer

Q 8 - If a bean is scoped to HTTP request, scope is

A - session

B - global-session

C - prototype

D - request

Answer : D

Explanation

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

Hide Answer

Q 9

A bean must have id attribute in beans configuration file.

A - True

B - False

Answer : B

Explanation

Id is not a mandatory attribute in beans configuration file.

Hide Answer

Q 10 - 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
Answer : C
Explanation
ACID stands for Atomicity, Consistency, Isolation, Durability.

Q 1 - 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
Answer : A
Explanation
Beans, Core, Context, SpEL are the modules in core container.
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A - XML Based configuration file.
B - Annotation based configuration.
C - Java based configuration.
D - All of the above.
Answer : D
Explanation
All of the above statements are correct.
 Show Answer
Q 3 - 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.
Answer : C
Explanation
<map> tag is used to inject a collection of name-value pairs where name and value can be of any type.
 Hide Answer
Q 4 - 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.

Answer : C

Explanation

In autodetect mode of autowiring spring first tries to wire using autowire by constructor, if it does not work, Spring tries to autowire by byType.

 Hide Answer

Q 5 - 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.

Answer : B

Explanation

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

 Hide Answer

Q 6 - 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.

Answer : B

Explanation

before advice runs before a method execution.

 Hide Answer

Q 7 - How to get object of a service in spring framework?

A - Using new keyword

B - Using dependency injection

Answer : B

Explanation

In spring, dependency injection is used to get any object.

 Hide Answer

Q 8 - If a bean is scoped to HTTP request, scope is

A - session

B - global-session

C - prototype

D - request

Answer : D

Explanation

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

 Hide Answer

Q 9 - Which class is used to map a database row to a java object in spring?
A - ResultSet
B - RowMapper
C - RowSetMapper
D - ResultSetMapper
Answer : B
Explanation
RowMapper class is used to map a database row to a java object in spring.
 Hide Answer
Q 10 - Where do you define DispatcherServlet?
A - In Beans configuration file.
B - Web.xml file
C - Meta-inf/dispatcher.xml
D - Web-inf/ dispatcher.xml
Answer : B
Explanation
DispatcherServlet is defined in web.xml of web application.

Q 1 - 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
Answer : A
Explanation
Beans, Core, Context, SpEL are the modules in core container.
 Hide Answer
Q 2 - Which are the IoC containers in Spring?
A - BeanFactory, ApplicationContext
B - BeanFactory, ApplicationContext, IocContextFactory
C - BeanFactory, BeanContext, IocContextFactory
D - BeanFactory, ApplicationContext, BeanContext
Answer : A
Explanation
BeanFactory, ApplicationContext classes acts as IoC containers in Spring.
 Hide Answer
Q 3 - 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.
Answer : A
Explanation

session scope instructs Spring IoC container to create a instance per HTTP session.

 Show Answer

Q 4

Can you inject null and empty string values in Spring?

A - Yes

B - No

Answer : A

Explanation

null and empty string values can be injected in spring beans.

 Hide Answer

Q 5 - 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.

Answer : B

Explanation

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

 Show Answer

Q 6 - 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.

Answer : B

Explanation

before advice runs before a method execution.

 Hide Answer

Q 7 - 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.

Answer : C

Explanation

ref is used to reference already defined bean and it can be used using both setter method and constructor argument.

 Hide Answer

Q 8 - Can we integrate Struts with Spring.

A - Yes

B - No

Answer : A

Explanation

Struts can be integrated with spring.

 Hide Answer

Q 9

A bean must have id attribute in beans configuration file.

A - True

B - False

Answer : B

Explanation

Id is not a mandatory attribute in beans configuration file.

 Hide Answer

Q 10 - Can we inject value and ref both together in a bean?

A - True

B - False

Answer : A

Explanation

Both values and ref can be injected at a time in a bean.

Q 1 - 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.

Answer : A

Explanation

Cross-cutting concerns are the functions that span multiple points of an application.

 Hide Answer

Q 2 - Which of the statement is correct?

A - The AOP module provides aspect-oriented programming implementation allowing you to define method-interceptors and pointcuts to cleanly decouple code that implements functionality that should be separated.

B - The Aspects module provides integration with AspectJ - Which is again a powerful and mature aspect oriented programming (AOP) framework.

C - The Instrumentation module provides class instrumentation support and class loader implementations to be used in certain application servers.

D - All of the above.

Answer : D

Explanation

All of the above statements are correct.

 Show Answer

Q 3 - 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.

Answer : A

Explanation

global-session scope instructs Spring IoC container to create a instance per HTTP application.

 Hide Answer

Q 4 - 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.

Answer : A

Explanation

Using Bean autowiring, Spring resolve collaborators (other beans) for your bean by inspecting the contents of the BeanFactory without using <constructor-arg> and <property> elements..

 Hide Answer

Q 5 - 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.

Answer : B

Explanation

@Autowired annotation provides more fine-grained control over where and how autowiring should be accomplished.

 Hide Answer

Q 6 - Which of the following aspect implementation spring supports?

A - XML Schema based aspect implementation

B - @AspectJ based aspect implementation

C - Both of above.

D - None of above.

Answer : C

Explanation
Spring supports both XML Schema based and @AspectJ based aspect
implementation.
 Hide Answer
Q 7 - 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.
Answer : A
Explanation
The @Controller annotation indicates that a particular class serves the role
of a controller.
 Hide Answer
Q 8 - Which class acts as IoC Container?
A - ServletContext
B - DispatcherServlet
C - ApplicationContext
D - None of the above
Answer : C
Explanation
ApplicationContext class acts as IoC Container.
 Hide Answer
Q 9 - What is the scope of stateless bean?
A - global-session
B - singleton
C - prototype
D - request
Answer : B
Explanation
Stateless bean is of singleton scope.
 Hide Answer
Q 10 - 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.
Answer : B
Explanation

BeanPostProcessor defines callback methods that you can implement to provide your own instantiation logic, dependency-resolution logic etc.

Question 1

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

```xml
<bean class="com.spring.service.MyServiceImpl">
<property name="repository" ref="jpaDao"/>
</bean>
<bean class="com.spring.repository.JpaDao"/>
```

1. The first declared bean MyServiceImpl is missing an id must be named myService
2. The second declared bean JpaDao is missing an id must be named jpaDao
3. Answers 1 and 2 are both rights
4. Answers 1 and 2 are both wrong

Question 2

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

```xml
<bean class="com.spring.service.BankServiceImpl"
p:bankName="NationalBank">
</bean>
```

1. The p namespace has to be declared
2. Bean id is bankServiceImpl
3. The BankServiceImpl references a NationalBank bean
4. NationalBank is a scalar value

Question 3

How is named the bean that is defined in the following configuration class. Select a single answer.

```java
@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

Question 4

How could you externalize constants from a Spring configuration file or a Spring annotation into a

.properties file? Select one or more answers
1. By using the <util:constant /> tag
2. By declaring the ConstantPlaceholderConfigurer bean post processor
3. By using the <context:property-placeholder /> tag
4. By using the c: namespace

Question 5
What statement is not correct in live environment? Select a unique answer.
1. Constuctor and properties autowiring in the same bean are not compatible
2. A bean should have a default or a no-args constructor
3. The <constructor-arg> tag could take type, name and index to reduce ambiguity
4. None of the above
5. All of the above

Question 6
What are the right affirmations about the @PostConstruct, @Resource and the @PreDestroy annotations?
1. Those annotations are specified in the JSR-250
2. The Spring Framework embedded those annotation
3. The <context:component-scan> tag enable them
4. The <context:annotation-config > tag enable them
5. Declaring the CommonAnnotationBeanPostProcessor enable them

Question 7
What is/are typically case(s) where you usually need to manually instanciated an ApplicationContext?
1. In a web application
2. In an integration test running with the SpringJUnit4ClassRunner
3. In a standalone application started with a main method
4. None of the above

Question 8
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.xm
l");
```
1. The classpath: prefix could be omit
2. Package name with dot is not well formatted using the dot character
3. The slash character preceding com.example could be omit
4. All of the above
5. None of the above

Question 9
How to auto-inject into a field a bean by its name? Select one or more response.
1. With the name attribute of the @Autowired annotation
2. By using the single @Qualifier annotation
3. By using both the @Autowired and the @Qualifier spring annotations
4. By using the @Autowired annotation and naming the field with the bean name

Question 10

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

more answers.

1. Mocking or stubbing the service
2. Be able to use the Spring auto-injection
3. Can do dependency checking
4. Loosely coupled code

Question 11

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

1. The method annoted 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 before the afterPropertiesSet callback method of the InitializingBean interface

Question 12

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();
}
}
```

1. @Configuration annotation is missing
2. Default or no-arg constructor is missing
3. @Bean name is ambiguous
4. @Bean scope is prototype

Question 13

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

Test

Question 14

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

1. A new Spring context is created for each test class
2. To get a reference on the bean you want to test, you have to call the getBean() method of the Spring context
3. Spring context configuration could be inherits from the super class
4. The Spring context configuration file has to be provided to the @ContextConfiguration annotation

Question 15
What are the main advantage(s) for using Spring when writing integration tests?
1. Reuse Spring configuration files of the application
2. Create mock or stub
3. Be able to use the rollback after the test pattern
4. Use dependency injection

Question 16
What are the main advantage(s) for using Spring when writing unit tests?
1. Reuse Spring configuration files of the application
2. Use dependency injection
3. Provide some mocks for servlet classes
4. All of the above
5. None of the above

Question 17
What is right about the spring test module?
1. It provides an abstraction layer for the main open source mock frameworks
2. Provides the @Mock annotation
3. It dynamically generates mock objects
4. All of the above
5. None of the above

Question 18
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

AOP
Question 19
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 pubic 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

Question 20

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

Question 21

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

Question 22

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

Question 23

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

Question 24

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

Question 25

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

Question 26

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

Question 27

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

Question 28

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

Data Access

Question 29

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

Question 30

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

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

Question 31

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

Question 32

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

Question 33

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

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

Transaction

Question 34

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

Question 35

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
}
```

1. The add() method executes code in a new transaction
2. The add() method uses the transaction of the transferMoney() method
3. When calling the add() method, an exception is thrown
4. Other behavior

Question 36

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

1. Yes with the TransactionTemplate class
2. Yes with the TransactionService class
3. Yes using the @Transactional bean post processor
4. No

Question 37

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

Question 38

What is the default rollback policy in transaction management?

1. Rollback for any Exception
2. Rollback for RuntimeException
3. Rollback for checked exceptions
4. Always commit

Sping @MVC

Question 39

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

1. An absolute path to the view
2. A logical view name
3. A new JstlView
4. void
5. null value

Question 40

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

Question 41

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)
```
Spring Security
Question 42
How could you secure MVC controller with Spring Security? Select a unique answer.

1. With the @Secured annotation
2. With the @RolesAllowed annotation
3. In a XML security configuration file
4. All of the above
5. None of the above

Question 43
What are the possible mechanisms provided by Spring Security to store user details? Select one or

more correct answers.

1. Database
2. JAAS
3. LDAP
4. Properties file

Question 44
What is true about Spring security configuration and the security namespace? Select one or more

correct answers.

1. The access attribute of the intercept-url tag support both EL and constants together.
2. The patterns declared into the intercept-url tag are analyzed from up to bottom. Winning is the first that matches.
3. The patterns declared into the intercept-url tag use by default the java regex syntax.
4. Security rules may applied depending request parameter

Remoting
Question 45
What do you have to do even if you are using the RMI Spring Remoting support? Select one or more

correct answers.

1. Implements the Remote interface
2. Extends the RemoteObject class
3. Catching the RemoteException exception
4. Implements the Serializable interface

Question 46
What is exact about the HttpInvokerServiceExporter? Select one or more correct answers.

1. Has to run into a HTPP server as Jetty
2. Could process both POST and GET requests
3. Could be used with any http client as Jakarta Commons HttpClient
4. Could consume SOAP http request

JMS
Question 47
What is the method that is not provided by the JmsTemplate Spring class?

1. convertAndSend
2. onMessage
3. receiveAndConvert
4. setDefaultDestination

Question 48

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

answers.

1. By implementing the javax.jms.MessageListener interface
2. By implementing the SessionAwareMessageListener interface provided by Spring
3. Without any code, only using the jms namespace provided by Spring
4. By writing a single POJO without parent class or interface

JMX

Question 49

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

1. Register any Spring bean as JMX MBean
2. Register an existing MBean with a MBeanServer
3. Accessing to remote MBean
4. Control the attributes and the operations of a Spring bean exposes as a MBean

Question 50

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

1. Expose a bean's property (getter/setter) to JMX
2. Expose a bean's method to JMX
3. Identify a Spring bean as a JMX MBean
4. None of the above

Response

Container

Question 1

Answer 2 is correct. Those beans are anonymous because no id is supplied explicitly. Thus Spring

container generates a unique id for that bean. It uses the fully qualified class name and appends a

number to them. However, if you want to refer to that bean by name, through the use of the `ref`

element you must provide a name (see Naming Beans section of the Spring reference manual). To be

correct, the 2nd bean has to declare a `jpaDao` id attribute in order to be reference by the `repository` property of the first bean.

Question 2

Answers 1 and 4 are correct.

1. To set bean's property with the p:propertyName shortcut, you have to declare the http://www.springframework.org/schema/p in your xml configuration file. No xsd is required.
2. The bean is anonymous. Spring generates a unique id:

```
com.spring.service.BankServiceImpl#0
```
3. To reference another bean with the p namespace, you have to use the p:propertyName-ref syntax

4. Due to the above explanation, NationalBank is not a bean reference, so it is a simple String and thus a scalar value.

Question 3

Correct answer is 3.

The @Bean annotation defines a String bean with the id "clientRepository". JpaClientRepository is

the implementation class of the bean. The data source is injected and is not declared in this class.

Question 4

The only possible answer is the number 3.

1. The <util:constant static-field="constant name"/> tag enables to reference a Java constant or enumeration into a spring configuration file

2. ConstantPlaceholderConfigurer does not exist. You may think about the PropertyPlaceholderConfigurer bean post processor.

3. The <context:property-placeholder location="file:/myApp.properties" /> tag activates the replacement of ${...} placeholders, resolved against the specified properties file.

4. The c: namespace is for simplifying constructor syntax (since Spring 3.1) and don't provide such feature.

Question 5

The statements number 5 is right.

1. You may auto-wiring properties by constructor, setter or properties in the same bean

2. The <constructor-arg> tag helps to instanciated a bean without default or no-args constructor

3. The <constructor-arg> tag could take type and index to reduce ambiguity, but not name which requires debug symbols.

Question 6

Answers 1, 3, 4 and 5 are rights.

1. The @PostConstruct, @PreDestroy and @Resource annotations are defined in the JSR-250

2. They belong to the javax.annotation package. You should add an external jar to use them in Java 5. Java 6 and 7 integrates them.

3. The <context:component-scan> automatically detects stereotyped classes and turns on the <context:annotation-config>

4. The <context:annotation-config > activates the Spring infrastructure for various annotations to be detected in bean classes, including the JSR 250 annotations

5. The CommonAnnotationBeanPostProcessor supports common Java annotations out of the box, in particular the JSR-250 annotations.

Question 7

Correct answer in the number 3.

1. In a web application, the ContextLoaderListener is in charge to create an WebApplicationContext.

2. In an integration test based on Spring, the SpringJUnit4ClassRunner creates the application

context for you. The @ContextConfiguration annotation allows to specified application context configuration files.

3. In a main method, you have to instanciated a class implementing the ApplicationContext interface (examples: ClassPathXmlApplicationContext or FileSystemXmlApplicationContext)

Question 8

Answer number 4 is right.

1. When using the `ClassPathXmlApplicationContext,` the classpath: prefix is default one
so you could omit it

2. In a Spring location resource, package separator is a slash and not a dot. Thus the com/example/myapp/config.xml syntax has to be used.

3. ClassPathXmlApplicationContext starts looking from root of the classpath regardless of whether specify "/"

Question 9

Answers number 3 and 4 are valid.

1. The @Autowired annotation has no name property, just a required one.

2. Autowiring a field, the @Inject or the @Autowired or the @Resource annotations are mandatory.

3. The @Qualifier("name") annotation complements the use of the @Autowired annotation by specifying the name of the bean to inject

4. When 2 beans are eligible to auto-injection, Spring uses the field name to select the appropriate one.

Question 10

Answers number 1 and 4 are valid.

1. With modern mock API like Mockito or EasyMock, interfaces are not mandatory for mocking or stubbing the service. But using interface remains easier when you have to manually mock the service in unit test.

2. Auto-injection is possible with class. Spring uses CGLIB.

3. Dependency checking is an advantage of dependencies injection.

4. The Inversion of Control pattern requires an interface to separate 2 classes. This pattern provides code more flexible, unit testable, loosely coupled and maintainable.

Question 11

Correct answers: 4

1. In the bean lifecycle, method annotated with @PostConstruct is called after the properties set step and the BeanPostProcessors#postProcessBeforeInitialization step

2. Destroy methods of prototype beans are never called

3. In the bean lifecycle, the afterPropertiesSet callback method of the InitializingBean is called after the method annotated with the @PostConstruct annotation and before the init-method declared in the XML configuration file.

4. In the bean lifecycle, the method annotated with the @PreDestroy annotation is called before the destroy callback of the DisposableBean interface and before the destroy-method declared in the XML configuration file.

Question 12

Correct answers are 1 and 2.

1. In order to be taken into account by Spring, the ApplicationConfig class has to be annotated with the @Configuration annotation

2. Default or no-arg constructor is mandatory. Here, the provided constructor with a dataSource parameter is not taken into account

3. The bean name is clientRepository. The name property of the @Bean annotation is specified thus the method name jpaClientRepository is ignored.

4.

Question 13

Correct answers are 3 and 4

1. Use <tx:annotation-driven /> to enable @Transactional annotation scanning

2. Use <aop:aspectj-autoproxy /> to enable detection of @Aspect bean

3. Turns on <context:annotation-config /> or <context:component-scan /> to enable @Autowiring annotation

4. Turns on <context:component-scan /> to enable @Component annotation scanning

Test

Question 14

The only correct answer is number 3.

1. The Spring context is cached across tests unless you use @DirtiesContext annotation

2. With the Spring test module, dependency injection is available in test case. So you may autowired

the bean to test

3. By default, a @ContextConfiguration annoted class inherits the spring context configuration file locations defined by an annotated superclass. The inheritLocations of this attribute allows to change this default behavior.

4. If no context configuration file is provided to the @ContextConfiguration annotation, Spring use a file convention naming. It try to load a file named with the test class name and suffices by the "-context.xml" suffice (i.e. MyDaoTest-context.xml)

Question 15

Correct answers are 1, 3 and 4.

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

1. More than testing multiple classes together, integration test may allow to test your spring configuration file and/or to reuse it.

2. Mocking or stubbing is more frequent in unit tests than in integration tests. And Spring does not provide any implementation or abstraction of mock framework.

3. The framework may create and roll back a transaction for each test method. Default rollback policy could be change by using the @TransactionConfiguration annotation. And default mode could be overridden by the @Rollback annotation.

4. DependencyInjectionTestExecutionListener provides support for dependency injection and initialization of test instances.

Question 16

The correct answer is the number 3.

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

1. You don't need Spring container to writer unit test

2. Refer to the answer number 1.

3. The org.springframework.mock package provides mock classes like MockHttpSession or MockHttpContext. They could be helpful for unit test in the presentation layer and when you don't use any mock framework such as Mockity or EasyMock.

Question 17

Answer 5 is correct.

What is right about the spring test module?

1. The spring test module does not provide an abstraction layer for open source mock frameworks like EasyMock, JMock or Mockito

2. The @Mock annotations comes from the Mockito framework

3. The spring test module does not provide mechanism to generate mock objects at runtime

Question 18

Correct statements are number 1 and 4.

1. The transactionManager property of the @TransactionConfiguration annotation enable to set the bean name of the PlatformTransactionManager that is to be used to drive transactions.

2. Method annotated with @Before is executed inside the test's transaction. You have to use the @BeforeTransaction to execute code outside the test's transaction.

3. The REQUIRES_NEW propagation suspends the current test's transaction then creates a new transaction that will be used to execute the service. A commit at the service level could not be changed by the test.

4. The transaction for the annotated method should be rolled back after the method has completed.

AOP

Question 19

The correct answer is the number 4.

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(..))

Poincut expression could not satisfied both first and second execution point. Do not confuse the &&

operator and || operator.

Question 20

Correct answer is the number 4.

Due to the proxy-based nature of Spring's AOP framework, protected methods are by definition not

intercepted, neither for JDK proxie nor for CGLIB proxies. As a consequence, any given pointcut will

be matched against public methods only!

To intercept private and protected methods, AspecJ weaving should be used instead of the Spring's

proxy-bases AOP framework.

Question 21

The 2 correct statements are 1 and 5.

What are the 2 correct statements about AOP proxy.

1. An object created by the AOP framework in order to implement the aspect contracts

2. If the target object does not implement any interfaces then a CGLIB proxy will be created. You could also use CGLIB proxy instead of JDK dynamic proxy

3. If the target object does not implement any interfaces then a CGLIB proxy will be created.

4. When CGLIB proxy is used, final methods cannot be advised, as they cannot be overridden.

5. AOP Proxies are created by the AbstractAutoProxyCreator#postProcessAfterInitialization method.

Question 22

The answer number 2 is correct.

1. A before advice could throw an exception

2. An after throwing advice is executed if a method exits by throwing an exception

3. An advice that executes before a join point is named a before advice

4. Spring supports after throwing advices

Question 23

Correct answer: 4

1. This is an after (finally) advice

2. This is an around advice

3. This is a before advice

4. True

Question 24

Correct answer: 1

1. Definition of an advice

2. Definition of a joint point

3. Represents nothing

4. Definition of a point cut

Question 25

Correct answer: 2

1. Definition of an advice

2. Definition of a pointcut

3. Represents nothing

Question 26

Correct answers: 1, 3

Select methods that match with the following pointcut:

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

1. True

2. The pattern (*) matches a method taking one parameter of any type

3. The com.test.service.account sub-package matches the pointcut

4. False for the same reason as answer number 2.

Question 27

Correct answers: 2

1. Interception of constructors requires the use of Spring-driven native AspectJ weaving instead of Spring's proxy-based AOP framework

2. The @annotation designator enables to select methods that are annotated by a given annotation

3. The staticinitialization AspectJ designator is not supported by Spring AOP

4. Pointcut expressions can be combined using &&, || and !

Question 28

Correct answers: 1

1. The execution of all public method

2. The * return type pattern indicates any return value or void

3. The (..) param pattern indicates 0, 1 or many parameters

4. No package name is specified. So classes of any package could match.

Data Access

Question 29

Correct answers: 2 , 4

1. Spring exception translation mechanism has nothing to do with read-only transaction

2. Read-only transaction prevents Hibernate from flushing its session. Hibernate do not do dirty checking and it increases its performance.

3. No

4. When jdbc transaction is marked as read-only, Oracle only accepts SELECT SQL statements.

Question 30

Correct answers: 1, 3, 4

1. JDBC is supported: JdbcTemplate, JDBCException wrapper …

2. Some NoSQL databases are supports through the Spring Data project

3. Hibernate is supported: HibernateTemplate, AnnotationSessionFactoryBean …

4. JPA is supported: LocalEntityManagerFactoryBean, @PersistenceContext annotation support

Question 31

Correct answer: 1

1. A JdbcTemplate requires a DataSource as input parameters

2. JdbcTemplate uses the probided datasource to open then close a JDBC connection

3. Callback methods of JdbcTemplate throw SQL Exception and Spring converts into DataAccessException

4. For example, the queryForInt method executes an SQL statement

Question 32

Correct answer: 3

1. RowMapper : result set parsing when need to map each row into a custom object

2. RowCallbackHandler : result set parsing without returning a result to the JdbcTemplate caller

3. ResultSetExtractor : for result set parsing and merging rows into a single object

4. ResultSetMapper : this class does not exist

Question 33

Correct answer: 3

1. False. This is supported by the AnnotationSessionFactoryBean using annotedClasses

2. False. This is supported by the AnnotationSessionFactoryBean using packagesToScan

3. True using mappingLocations

4. False

Transaction

Question 34

Correct answer: 2

1. <tx:jta-transaction-manager />
2. Id of the transaction manager bean could be customized (ie. txManager)
3. DataSourceTransactionManager is a transaction manager for a JDBC data source. HibernateTransactionManager may be used to manage transaction with Hibernate.
4. The AbstractPlatformTransactionManager has a defaultTimeout property that could be customized

Question 35

Correct answer: 2

In proxy mode, only external method calls coming in through the proxy are intercepted. In the code

snippet, the add() method is self-invocated. This means that, the @Transactional annotation of the

add() method is not interpreted. The REQUIRES_NEW propagation level is not taken into account.

To summary, when the transferMoney() methods calls add() method directly, the transaction attributes of add() method are not used

Question 36

Correct answer: 1

1. The TransactionTemplate class provides an execute(TransactionCallback) method
2. The TransactionService class does not exists
3. The @Transactional annotation is for declarative transaction management

Question 37

Correct answer: 3

1. PROPAGATION_REQUIRED
2. PROPAGATION_NESTED
3. PROPAGATION_REQUIRES_NEW

Question 38

Correct answer: 2

1. False.
2. True
3. False
4. False

Sping @MVC

Question 39

Correct answer: 1

1. Spring does not allow to return an absolute path to the view
2. Controller could return a String that matches with a logical view name
3. A JstlView with the .jsp path (i.e. /WEB-INF/accountList.jsp)
4. void forward to the default view
5. null forward to the default view

Question 40

Correct answer: 2, 4

1. Spring MVC controllers are beans. So you can declare them into a Spring application context XML configuration file that could be loaded by the DispatcherServlet.

2. In the web.xml, you may declarer and a ContextLoaderListener and a DispatcherServlet that are in charge to load XML Spring configuration files. But you cannot declare controllers directly in these file.

3. The @Controller annotation may be used to annoted Spring MVC Controller beans that handle HTTP requests.

4. JSP is the View of the MVC Pattern. Thus this is not the right place to declare controllers.

Question 41

Correct answer: 3

1. HttpServletRequest and HttpServletResponse have to be mocked. Id of the account to display

could be set into the http request parameters.

2. HttpServletRequest and HttpSession have to be mocked. Id of the account to display could be

set into the http request parameters.

3. This method is not dependent of the servlet API. Id of the account to display may be directly passed through the call stack. Thus test methods are simplified.

4. The *@PathVariable* annotation has to be bound to a URI template variable. This is not the case.

Sping Security

Question 42

Correct answer: 4

1. @Secured annotation is a Spring Security annotation

2. @RolesAllowed is a JSR-250 annotation that is supported by Spring Security

3. Spring Security could be configured in a XML way to intercept particular URLs

Question 43

Correct answer: 1, 2, 3 and 4

Question 44

Correct answer: 2

1. You cannot mix EL and constant in the same configuration file

2. If more than one intercept-url matches, the top one is used

3. Ant pattern is used by default. But you can change to use regular expression.

4. Security rules may apply to request URL, request method (GET, POST …) but not to request parameters.

Remoting

Question 45

Correct answer: 4

1. No more interface to implement. RMI Client and Server could be POJO.

2. No more class to extend. RMI Client and Server could be POJO.

3. Spring Remoting wraps the cheched RemoteException into RuntimeExcpetion.

4. Object that are transferred via RMI are serializabled/unserializabled. So they have to implement the Serializable interface.

Question 46

Correct answers: 1, 3

1. HttpInvokerServiceExporter requires a HTTP web server to process incoming http request. Tomcat or Jetty is possible candidates. Spring also supports the Oracle/Sun's JRE 1.6 HTTP server.

2. Only the POST method is supported. Maybe due to the 256 characters limit of the GET method.

3. Spring comes with 2 http client implementations: for Commons HttpClient and classic JavaSE API. You can create a custom one by extending the AbstractHttpInvokerRequestExecutor class.

4. Does not support SOAP web service. Use the Spring web service module or use the JAX-WS or JAX-RPC remoting support.

JMS

Question 47

Correct answer: 2

1. The convertAndSend method sends a given object to a destination, converting the object to a JMS message.

2. The onMessage method does not exist.

3. The receiveAndConvert method receives a message synchronously then convert the message into an object

4. The setDefaultDestination method sets the destination to be used on send/receive operations that do not have a destination parameter.

Question 48

Correct answers: 1, 2 , 4

1. The javax.jms.MessageListener interface could be used with the SimpleMessageListenerContainer

2. The SessionAwareMessageListener interface could be used with DefaultMessageListenerContainer and SimpleMessageListenerContainer

3. Business code is required to handle and process the JMS message.

4. A JMS Listener could be a POJO. The name of the handler method to invoke has to be specified in the <jms:listener /> tag.

JMX

Question 49

Correct answers: 1, 2, 3, 4

1. The MBeanExporter class allow to expose any Spring bean as a JMX MBean

2. Exiting MBean could be declared as Spring bean. Then the <context:mbean-export /> directive enables their registration to the MBeanServer

3. Remote MBean could be access through a proxy

4. Implementations of the MBeanInfoAssembler interface do the job

Question 50

Correct answer: 3

1. @ManageAttribute exposes a bean's property (getter/setter) to JMX

2. @ManageOperation exposes a bean's method to JMX

3. @ManageResources identify a Spring bean as a JMX MBean

1.Name attribute of @Column annotation permits the name of the column to be explicitly specified.
A - true
B – false

2. Can you inject null and empty string values in Spring?
A - true
B – false

3. 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------ANS

4. 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.

5. - SpEL is part of core container.
A - False
B - True

6 - 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.

7. SpEX is NOT one of its module Core container.
A - True
B – False

8. 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.

9. Can we inject value and ref both together in a bean?
A - True
B – False

10. Beans, Core, Context, SpEL are the modules of core container.
Ans : true

11. 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.

12. 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.

13. Run advice before and after the advised method is invoked.
ans. around advice

14. 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

15. needs to be implemented by objects that can resolve views by name .
ANS : ViewResolver

16. The @Transactional annotation allows u to def transactions programmatically.
Ans: FALSE

17. 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.

18. Which of the following is correct assertion about spring?

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

B - Spring is organized in a modular fashion.

C - Testing an application written with spring is simple because environment-dependent code is moved into this framework.

D - All of above.

19. 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"/>
```

1. The first declared bean MyServiceImpl is missing an id must be named myService

2. The second declared bean JpaDao is missing an id must be named jpaDao

3. Answers 1 and 2 are both rights

4. Answers 1 and 2 are both wrong

20. How to auto-inject into a field a bean by its name?

Select one or more response.

1. With the name attribute of the @Autowired annotation

2. By using the single @Qualifier annotation

3. By using both the @Autowired and the @Qualifier spring annotations

4. By using the @Autowired annotation and naming the field with the bean name.

21.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.

22.What are the modules of spring web flow?
 a.Spring-faces
 b.Spring-bundling
 c.Spring-container
 d.Spring-webflow

23. 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
24. Spring MVC provides better way to seperate which of the following?
 a.Presentation
 b.Tools
 c.Data Access
 d.Bussiness Logic

25. To validate the form fields you need to have a seperate UserValidator class that implements
the validator interface, Override the validate() method perform all the validations.
State True or False
a). TRUE-------------ANS
b). FALSE

26. XML Mapping file offers which of the following?
Select One:
a.Readable Metadata
b.Surrogate key generation strategy
c.Collecion metadata
d.all the listed options---------ANS
e.Column/Table Mapping

22. In Spring AOP, the process of linking aspect with other application types
or objects to create an advice object is called _____.

Weaving(ans)

23. <list> tag is used to wire a list of values, allowing duplicates.

24. BeanFactory, ApplicationContext classes acts as IoC containers in Spring.

25. AOP stands for Aspect Oriented Programming.

26. SpEL is NOT part of core container.
ANS: false (it is part of core container)

27. Following class can be extended to create custom event in spring.
ans: ApplicationEvent

28. 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 the above

29. how many intances can be created fora global session?
ANS: one

30. what display the data with help of model?
Ans: View

31. 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.

32. which can be used to inject a collection of name value pairs where name and value can be of any type.
(MAP)

33. 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.

34. which of the following not availble in HQL?
ANS: select,having,where

35. which is a aggregate function in HQL(multiple choice)?
sum avg count (NOT Aggregate).

36. Which of the following database is not supported by Hibernate?
A - DB2/NT
B - MySQL
C - FoundationDB
D – PostgreSQL

37. 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.

38. 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.

39. what is required to write a basic spring program?
a. jdk
b. ide
c. marven
d. all the above

40. JDBC, ORM, OXM, JMS, Transactions are the modules of Data Access/ Integration layer.

41. Spring framework is a light weight framework.

42. singleton is the default scope of any spring bean.

43. Given the following configuration class, what are correct affirmations?
   public class ApplicationConfig {

```
  private DataSource dataSource;
   @Autowired
   public ApplicationConfig(DataSource dataSource) {
  this.dataSource = dataSource;   }
  @Bean(name="clientRepository")
  ClientRepository jpaClientRepository() {
  return new JpaClientRepository(); }  }
```
1. @Configuration annotation is missing----------ANS
2. Default or no-arg constructor is missing-------ANS
3. @Bean name is ambiguous
4. @Bean scope is prototype

44. <id name="deptId" type="string">
<column name="columnid" length="30"/>
<generatoers/> <id/> [/xml]
The above is an example of creatinf which key?
a.DB key
b.Unique key
c.Secondary key
d.Primary key--------ANS

45.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-------------ANS
b.only II
c. Neither I or II
d. Both I and II

46.Which of the following is a many to one relationship
a) many-to-one
b) <many-to-one>---------ANS
c) None of the list
d) <Manyone>

47. 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-----------ANS(not sure)

48.Which of the following is not available in HQL
a) Select
b)Where
c)Sub--------------Ans(not sure)
d)Having

49.maven is a project management and comprehension too
True----------Ans
False

50. How many layers are there in Hibernate architechture
a)3
b)4-------Ans
c)5
d)2

51. Beans,Core, Context,spEL are the components in Core container
True----------Ans
False

52. PROPAGATION_REQUIRES_NEW
Ans: Creates a new transaction, suspending the current transaction if one exists.

53. 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>--------------ANS
d)<props>

54. 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>--------------ANS

55. which type of annotation applies to bean property setter methods
a)@Requires
b)@Resource
c)@Required---------------ANS
d)@Requiring

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

57. Which tool helps to generate the mapping document Though many Hibernate users choose to write the XML by hand
a)oldgen
b)younggen
c)Middlegen----------------ANS
d) Mediumgen

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

59. What types of views supported by spring MVCfor different presentation technologies
a)JSP
b)HTML
c)velocity templates
d) select all -----------------ANS

60. Spring is a heavy weight framework
True
False----------Ans

61. A very powerful and high performance querying language used to Query,retrive,store data in DB is
a)PLSQL
b)HQL-------ANS(not sure)
c)SQL
d)RDBMS

62. 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--------ANS

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

63.You would need one sessionfactory obj per database using a seperate config file. True
False

64. which is used to start the validator in spring mvc validator ?

65. which elements not supported by hql?
A.sub
B.where,
C.having
D.select

66. what does hibernate batch update and delete do?

optn: all of above;
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;

67. does sessionLocaleResolver interceptor detects if a special parameter is present in current Http req?
No….ANS

68.what is true abt 'clean' maven life cycle ?
When we execute mvn post-clean command, Maven invokes the clean lifecycle consisting of the following phases.
pre-clean
clean
post-clean
Maven clean goal (clean:clean) is bound to the *clean* phase in the clean lifecycle. Its *clean:clean* goal deletes the output of a build by deleting the build directory. Thus when *mvn clean* command executes, Maven deletes the build directory.

69.j2ee integration with hibernate is very difficult.

true/false

70.what is true abt 'clean' maven life cycle ?
java based config option disables u to write most of ua spring config without xml but with help of few java based annotations . true/false?
71. named queries are created cia which level of annotations on entities ?
optn : high level, all level, class level, low level
what is true abt 'clean' maven life cycle ?

)what are features of xml <context: namespace?

xml schema based config is introduced in which version of spring

how many bean scopes are specified in singleton by default?

17) which of the following interpret user input and transform it into a model that is represented to the user by the view..optns: controllers, none, webapplicationcontext, dispacther servlet

18)tags generated by form tag lib are compliant with xhtml-1.0 strict specification and attendant dtd. true/false

1. archetype is a maven plugin whose task is to create a project structure as per its template(t/f)

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

a.xml based config fle----ans
b.annotation based config-----ans
c.java based config-----ans

3. spring applications is tightly coupled because of dependency injection(t/f)

4. named queries are created via which level of annotations on entities?
a.all-level
b.high-level
c.low
d.class level

5. in spring bean configurations, bean attribute called 'scope' defines what kind of object has to be created and returned
what returns a new bean instance each time when requested?
a. request
b.prototype------ans
c.global session
d.singleton-----ans

6. the view interface inhabits the preparation of the request and hands the request over to one of the view technologies(t/f)
7. how many bean scopes are specified in singleton by default
a.6
b.7
c.5
d.none-----ans

8. xml schema based configuration is introduced in which version of spring – (2/2.5/3/none)-------2.5

9. the test module supports the testing of spring components with junit for testing(t/f)

10. in controller which is responsible for rendering the page in spring mvc
a.browser
b.http
c.database
d.application

11. 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------ans
d.none

12. spring can organize which type of objects?
a.application later
b.database layer
c.network
d.browser

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

14. hibernate is an open orm tool for java(t/f)-----true

15. Properties of HQL

16. View Resolver

17. No.of layers in hibernate architecture-4

18. J2EE integrated with Hibernate is very difficult (T\F)

19. XML based on expression and it is used extensively in conjuction with in XSLT ?
a.XPath parser b.JDOM c.SAX d.StAX------xpath server

20. Is it difficuit to inject dependency inject (Ioc) by construction (T/f)

1. Bean post processor is a concrete class
true
false
Ans - false

2. The Spring MVC pattern does not separate the different aspects of the application into input logic, business logic, and UI logic.
true
false
ans:false

3. use of addclass function
it is used to convert java class name into file name
with the file name, input stream, reader will be processed
using add class, other classes will be used efficiently.

4. 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

   Ans:all the above

5. Given the Spring configuration file, which are the correct statements?

```
<bean class="com.spring.service.BankServiceImpl"
p:bankName="NationalBank">
</bean>
```
1. The p namespace has to be declared
2. Bean id is bankServiceImpl
3. The BankServiceImpl references a NationalBank bean
4. NationalBank is a scalar value
Ans:The p namespace has to be declared

6.which is correct?
     Hibernate is a object oriented query language
     It is database independent
     it supports pagination
     HQL statements will be converted to SQL or other language the
database supports
Ans:all the above

7. What statement is correct in live environment? Select a unique answer.
     1. Constuctor and properties autowiring in the same bean are not
compatible
     2. A bean should have a default or a no-args constructor
     3. The <constructor-arg> tag could take type, name and index to
reduce ambiguity
     4. All of the above

Ans: all the above

8. 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

Ans:The execution of all public method in class belonging to the default java
package.

9. 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
Ans: 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.

10.What an interceptors do?

11.Types of autoproxing?
    BeanNameAutoProxyCreator
    DefaultAdvisorAutoProxyCreator
Ans: Both

12.Which scope is a single bean definition to have any number of object instances - prototype-----Ans

13.Modules of web flow:
14.core components in spring
ANS: @Component, @Repository, @Service and @Controller annotations

15.which of the following is an invalid annotation?
@RequestParam
@PAthValid
@Responsevalid
@RequestMapping
Ans- @Responsevalid

16.Which of the following is true regarding prototype:

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

Ans: scope is a single bean definition to have any number of object
instances

the instances will be created for each bean dependency

17.which annotation is used in setter?
@Response
@Request
@Required
Ans: @Required

18.Which of the following handles all the HTTP requests and response?
Ans: Dispatcher Servlet

19.Cache enables the database to hit as much as possible for better performance in critical applications.
true
False
Ans- true

20.View Resolver provides a mapping between view names and actual views.
true
false
Ans:True

21.What is a view resolver?
class
interface
object
argument
Ans:Interface

22.Model is used to encapsulate the response data
true
false
Ans - true

23.which one interpret user input and transform it into a model that is represented to the user by the view.
controller
dispatcher servlet
model
browser
AnS: controller

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

before
around
none of the above
Ans:around

25.Integration of J2EE with hibernate is difficult.
True
False
Ans- false

26.Application contexts can publish events to beans that are registered as listeners.
true
false
ans: true

27.which is not used as java annotation
@component
@bean
@configuration
none
Ans:none

28.which mapping is given in hibernate in common?
object
relational
class
column
Ans-object/relational

29.In which level, sql query is integrated in HQL?
class level
low level
high level
object level
ans-object level

30.Hibernate supports query cache
true
false
Ans - true

31.What are the mapping associations used in hibernate?

One-to-One Association
Many-to-One Association
One-to-Many Association
Many-to-Many Association

ans: One-to-One Association
     Many-to-Many Association

32.What are the different fetching strategies in hibernate?
1. Join Fetching
2. Batch Fetching
3. Select Fetching
4. Sub-select Fetching
Ans: all

33.Hibernate helps in mapping of java objects with database tables
true
false
ans:true

34.In which way, the properties of one bean is used by number of beans?
inheritance
dependency injection
through child bean

Q 1 - What ORM stands for?
A - Object Relation Map
B - Object Relational Mapping
C - Object Record Mapping
D - None of the above.

Q 2 - 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.

Q 3 - Session.createQuery creates a new instance of Query for the given HQL query string.
A - True
B - False

Q 4 - 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.

Q 5 - Which of the following element maps java.util.SortedMap property in hibernate?

A - <set>

B - <list>

C - <bag>

D - <map>

Q 6 - 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.

Q 7 - 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.

Q 8 - 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.

Q 9 - Which of the following is a core component of Hibernate?

A - Transaction

B - SessionFactory

C - Session

D - All of the above

Q 10 - 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.

Q 11 - Which of the following is not an ORM framework?

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

Q 12 - 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.

Q 13 - 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.

Q 14 - 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()

Q 15 - Which of the following element maps java.util.List property in hibernate?
A - <set>
B - <list>
C - <bag>
D - <map>

Q 16 - 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.

Q 17 - What HQL stands for?
A - Hibernate Query Language
B - High Query Language
C - Hybrid Query Language
D - None of the above.

Q 18 - Which of the following database is not supported by Hibernate?
A - Oracle

B - Microsoft SQL Server Database
C - FoundationDB
D - Informix Dynamic Server

Q1 9 - A Session is used to get a physical connection with a database.
A - true
B - false

Q 20 - 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.

Q 21 - 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.

Q 22 - 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.

Q 23 - 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 ()

Q 24 - Which of the following element maps java.util.Map property in hibernate?
A - <Set>
B - <List>
C - <Bag>
D - <Map>

Q 25 - 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.

Q 26 - 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.

Q 27 - 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.

Q 28 - 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.

Q 29 - 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.

Q 30 - 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.

Q 31 - Session.createSQLQuery creates a new instance of Query for the given SQL query string.
A - true
B - false

Q 32 - Which method is used to get a persistent instance from the datastore?
A - Session.read()
B - Session.get()
C - Session.retrieve()
D - Session.fetch()

Q 33 - 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.

Q 34- 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.

Q 35- Is query level caching mandatory in hibernate?

A - true

B - false

Q 36 - 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.

Q 37 - 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.

Q 38 - Which of the following is not a core component of Hibernate?

A - JDBC

B - SessionFactory

C - Session

D - Configuration

Q 39 - Is Session a thread-safe object?

A - true

B - false

Q 40 - Which method is used to remove a persistent instance from the datastore?

A - Session.delete()
B - Session.remove()
C - Session.del()
D - Session.rm()

Q 41- 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()

Q 42 - Is first level caching mandatory in hibernate?
A - true
B - false

Q 43 - Which of the following database is supported by Hibernate?
A - DB2/NT
B - PostgreSQL
C - Sybase SQL Server
D - All of the above

Q 44 - Configuration object is used to create SessionFactory object in hibernate.
A - true
B - false

Q 45 - name attribute of @Column annotation permits the name of the column to be explicitly specified.
A - true
B - false

Q 46- 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

Q 47 - Session.beginTransaction method begins a unit of work and returns the associated Transaction object.
A - true
B - false

Q 48 - Which element of hbm.xml automatically generate the primary key values?
A - id

B - generator
C - primaryKey
D - None of the above.

Q 49- 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.

Q 50 - The SessionFactory is heavyweight object.
A - false
B – true

Q 51 - 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.

Q 52 - 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.

Q 53 - 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.

Q 54- 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.

Q 55 - 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.

Q 56 - Which of the following object is used to create SessionFactory object in hibernate?
A - Configuration
B - Session
C - SessionFactory
D - Transaction

Q 57 - Session.createQuery creates a new instance of Query for the given HQL query string.
A - true
B - false

Q 58 - 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.

Q 59 - Is second level caching mandatory in hibernate?
A - true
B - false

Q 60- Which of the following is a core component of Hibernate?
A - Transaction
B - SessionFactory
C - Session
D - All of the above

Q 61 - name attribute of @Column annotation permits the name of the column to be explicitly specified.
A - true
B - false

Q 62 - 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.

Q 63 - 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.

Q 64 - 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.

Q 65 - Session.beginTransaction method begins a unit of work and returns the associated Transaction object.
A - true
B - false

Q 66 - 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

Q 67 - 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.

Q 68 - 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.

Q 69- Which of the following tools/frameworks provides integration with Hibernate?
A - XDoclet Spring
B - J2EE
C - Maven
D - All of the above.

Q 70 - Which of the following element maps java.util.Collection property in hibernate?

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

Q 71 - 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.

Q 72- Which of the following is the root node of hbm.xml file?
A - hibernate-mapping
B - hibernate-config
C - class-mapping
D - class-config

Q 1 - 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.

Q 2 - 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.

Q 3 - What is true about <list> 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.

Q 4 -Can you inject null and empty string values in Spring?
A - Yes
B - No

Q 5 - 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.

Q 6 - 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.

Q 7 - 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.

Q 8 - By default a bean is eagerly loaded.
A - False
B - True

Q 9 -A bean must have id attribute in beans configuration file.
A - True
B - False

Q 10 - 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.

Q 11 - 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.

Q 12 - 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.

Q 13 - 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.

Q 14 - 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.

Q 15 - Which ORM Spring supports ?
A - Hibernate
B - iBatis
C - JPA
D - All of above.

Q 16 - What stands true for spring framework?
A - Spring framework is a light weight framework.
B - Spring framework is a heavy weight framework.

Q 17 - How to handle shut down of IoC container?
A - Using shutdownHook()
B - Using shutdownHandler()
C - Using registerHook()
D - Using registerShutdownHook()

Q 18 - Which of the following class can be used to execute Sql queries in spring?
B - JDBCHelper
A - JdbcTemplate
C - DBHelper
D - DBTemplate

Q 19 - Which is the correct implementation class of BeanFactory?
A - XmlBeanFactory
B - ClassPathBeanFactory
C - FileSystemBeanFactory
D - AdvancedBeanFactory

Q 20 - 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.

Q 21 - How to get object of a service in spring framework?
A - Using new keyword
B - Using dependency injection

Q 22 - If a bean is scoped to HTTP request, scope is
A - session
B - global-session
C - prototype
D - request

Q 23 - Can be bean be configured to have an inner bean?
A - True
B - False

Q 24 - 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

Q 25 - 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.

Q 26 - 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.

Q 27 - Core container has AOP as one of its module.
A - True
B - False

Q 28 - Which class is used to map a database row to a java object in spring?
A - ResultSet
B - RowMapper
C - RowSetMapper
D - ResultSetMapper

Q 29 - 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

Q 30 - 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.

Q 31 - 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.

Q 32 - 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.

Q 33 - 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.

Q 34 - 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.

Q 35 - Expression Language/ SpEL was introduced in which version of spring framework.
A - 1.0
B - 2.0
C - 3.0
D - 4.0

Q 36 - Can we inject value and ref both together in a bean?
A - True
B - False

Q 37 - 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.

Q 38 - 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

Q 39 - Which of the following is part of Data Access layer in Spring framework?
A - Beans
B - Aspects
C - JMS
D - Context

Q 40 - 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.

Q 41 - Which are the IoC containers in Spring?
A - BeanFactory, ApplicationContext
B - BeanFactory, ApplicationContext, IocContextFactory
C - BeanFactory, BeanContext, IocContextFactory
D - BeanFactory, ApplicationContext, BeanContext

Q 42 - 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.

Q 43 - 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.

Q 44 - 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.

Q 45 - 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.

Q 46 - 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.

Q 47 - 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 the above.

Q 48 - 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.

Q 49 - What is byType mode of autowiring?
A - Default setting which meas 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.

Q 50 - 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.

Q 51 - 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.

Q 52 - SpEL is part of core container.
A - False
B - True

Q 53 - If a bean can be created any number of times, scope is
A - session
B - global-session
C - prototype
D - request

Q 54 - 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.

Q 55 - 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.

Q 56 - 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.

Q 57 - 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.

Q 58 - Which of the following database is not supported using jdbcTemplate?
A - MySql
B - PostgresSql
C - NoSql
D - Oracle

Q 59 - What is the scope of stateless bean?
A - global-session
B - singleton
C - prototype
D - request

Q 60 - 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

Q 61 - 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.

Q 62 - 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.

Q 63 - 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

Q 64 - Can we integrate Struts with Spring.
A - Yes
B - No

Q 65 - 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

Q 66 - By default a bean is eagerly loaded.
A - False
B - True

Q 67 - Where do you define DispatcherServlet?
A - In Beans configuration file.
B - Web.xml file
C - Meta-inf/dispatcher.xml
D - Web-inf/ dispatcher.xml

Q 68 - 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.

Q 69 - 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.

Q 70 - 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.

Q 71 - What is Spring MVC framework?
A - Spring MVC framework is Model-Value-Class architecture and used to bind model data with values.
B - The Spring web MVC framework provides model-view-controller architecture and ready components that can be used to develop flexible and loosely coupled web applications.
C - Spring MVC framework is used for Transaction management for Web Applications.
D - Spring MVC framework is used for AOP for Web Applications.

Q 72 - 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.

Q 73 - 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

Q 74 - 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.

Q 75 - 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.

Q 76 - What is default scope of bean in Spring framework?
A - singleton
B - prototype
C - request
D - session

Q 77 - What is the scope of bean in portlet context?
A - session
B - global-session
C - prototype
D - request

Q 78 - Following class can be extended to create custom event in spring.
A - SpringEvent
B - Event
C - ApplicationEvent
D - None of above

Q 79 - 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.

Q 80 - 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.

Q 81 - Which class acts as IoC Container?

A - ServletContext

B - DispatcherServlet

C - ApplicationContext

D - None of the above

Q 82 - 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.

Q 83- 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

Q 84 - Which of the following class can be used to call Stored Procedures in spring?

A - SPHelper

B - JdbcTemplateCall

C - JdbcTemplate

D - SimpleJdbcCall

Q 85 - Which are the correct implementation classes of ApplicationContext?

A - FileSystemXmlApplicationContext, ClassPathXmlApplicationContext, WebXmlApplicationContext

B - FileSystemApplicationContext, ClassPathApplicationContext, WebApplicationContext

C - AdvancedApplicationContext, FileApplicationContext

D - FileSystemApplicationContext, ClassPathApplicationContext

Q 86 - 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.

Q 87 - Which of the following is correct assertion about spring?
A - Spring enables developers to develop enterprise-class applications using POJOs.
B - Spring is organized in a modular fashion.
C - Testing an application written with spring is simple because environment-dependent code is moved into this framework.
D - All of above.

1) In Spring AOP, the process of linking aspect with other application types or objects to create an advice object is called _____.
Weaving(ans)

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? **ans: yes**

5) AOP stands for **Aspect Oriented Programming.**

6) SpEL is NOT part of core container. **ANS: false (it is part of core container)**

7)Following class can be extended to create custom event in spring. **ans: ApplicationEvent**

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-----------------ANS

9)Which are the modules of Web layer? **ans:WebSocket, Servlet, portlet,web**

10) how many intances can be created fora global session : **one**

11)what display the data with help of model? **Ans: View**

12) read the below statements and ans according to questions

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-----------ANS

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

14)which can be used to inject a collection of name-value pairs where name and value can be of any type. **ANS--------MAP**

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

16)which of the following not availble in HQL?(question is not clear)

17)which is a aggregate function in HQL(multiple choice)? **ANS-sum, avg and count (dont select aggregate)**

18)Which of the following database is not supported by Hibernate?
A - DB2/NT
B - MySQL
C - FoundationDB----ANS
D - PostgreSQL

19)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.-----ANS
D - None of the above.

20)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.-------ANS
D - None of the above.

21)what is required to write a basic spring program? **ANS----jdk,ide,maven,all the above**

22)BeanFactory, ApplicationContext classes acts as IoC containers in Spring.

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

24)ContextStartedEvent event is published when the ApplicationContext is started using the start() method on the ConfigurableApplicationContext interface.-----**TRUE**

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

26)singleton is the default scope of any spring bean**.-----TRUE**

27)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------------------------ANS
c I only
d Both I and II are incorrect

28)Which of the following parses in XML based on expression and its used extensively in conjugation with xstl ?
Select One:
a)JDOM parser
b)SAX parser
c) STAX parser
d) Xpath parser0------ANS

29) what is true about BeanFactory, ApplicationContext?
ANS-BeanFactory is basic and ApplicationContext is advanced

30)What are the common implementations of the Application Context ?
ANS-
FileSystemXmlApplicationContext,ClasspathXmlApplicationContext,WebxmlApplication
Context(answers are confusing- xml should be common in those three)

31) org.springframework.web.servlet.DispatcherServlet is the congfiguration in xml file for dispatcherServlet.

32) The central artefact in spring javConfig is the @Configuratuion annotated class?

State True or False
a). TRUE-------------ANS
b). FALSE

33) maven is a project management and comprehension tool-----**True**

34)session----This scopes a bean definition to an HTTP session only.

35) What of the following is not correct in live environment?
select one
a. Constuctor and properties auto wiring 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

36) 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();
   }
   }
```
1. @Configuration annotation is missing----------ANS
2. Default or no-arg constructor is missing-------ANS
3. @Bean name is ambiguous
4. @Bean scope is prototype

37) Question on servlet wrapping(Not clear)

38)[xml]
<id name="deptId" type="string">
<column name="columnid" length="30"/>

[/xml]

The above is an example of creatinf which key?
Select One:
a.DB key
b.Unique key
c.Secondary key
d.Primary key--------ANS

39)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------------------ANS

40)Not a type of mapping
I. instance mapping
II. association mapping
III. Class mapping
IV.

41)ContextClosedEvent--------is published when the ApplicationContext is closed using the close() method on the ConfigurableApplicationContext interface

42)Around advice------Run advice before and after the advised method is invoked.

43)HQL- easily stores, update and retrieve from the database
State True or False
a). TRUE-------------ANS
b). FALSE

44)Hibernate is lightweight,opensource and ORM (Multiple choice)
ANS-------all the above

45)Hibernate session is the main runtime interface between java applications and hibernate.
State True or False
a). TRUE-------------ANS
b). FALSE

46)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-------------ANS
b). FALSE

47)spring mvc is a model-view-controller

State True or False
a). TRUE-------ANS
b). FALSE

48)form fields are validated using user defined validations class by implementing validation interface
State True or False
a). TRUE------TRUE
b). FALSE

49) spring does not seperate three modules like presentation layer,bussiness layer and data access layer
State True or False
a). TRUE
b). FALSE-------ANS

50) pick odd one out in the following annotations
I.@PathValid
II.@responsevalid
III.@Controller
IV.@requestmapping

51)lenth returns number of rows in a column for only string type
State True or False
a). TRUE
b). FALSE

52)which level cache implements a cache for query resultsets
a.Third level cache
b.Second level cache
c.First level cache
d. Fourth level cache

53)read about prototype and singleton scopes.

54)form tags are available in springs is more compatible wth html tags for better development
State True or False
a). TRUE-----------ANS
b). FALSE

55) 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

56)what are the modules in the spring-webflow(question not clear)
bundling
spring-webflow
spring-
spring-

57)what is the function of clean maven lifecycle command
ANS-cleans artefacts in the earlier build

58)which of the following is not the best pracice?
I.Exit controller has to define in web.xml
II.bean definition
III.open the server and deploy the project
IV.@controller usage
59.Constructor injection is didfficult to inject
State True or False
a). TRUE
b). FALSE

60.index and type can be used in the constrictor-arg at the same time?
State True or False
a). TRUE
b). FALSE

61.Which of the following is a one to one relationship
a) <many-to-many>
b) <many-to-one>
c) None of the list---------ANS
d) <one-to-many>

62) the same XSD of BeanFactory can be used for View resolver interface?
State True or False
a). TRUE---------------ANS
b). FALSE

63) Which of the following is correct assertion about spring?
A - Spring enables developers to develop enterprise-class applications using POJOs.
B - Spring is organized in a modular fashion.
C - Testing an application written with spring is simple because environment-dependent code is moved into this framework.
D - All of above.---------ANS

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

66) Spring MVC provides predefined templates for JDBC, Hibernate and JPA.
State True or False
a). TRUE-------------ANS
b). FALSE

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
Select One:
a. only I--------------ANS
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?
select one or more
a.Using consistent naming conventions-------ANS
b. Rarely use classpath
c.Mentioning version numbers in schema references
d.reuse bean definitions as much as possible--------ANS

69) To validate the form fields you need to have a seperate UserValidator class that implements the validator interface, Override the validate() method perform all the validations.
State True or False
a). TRUE-------------ANS
b). FALSE

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
Select One:
a.I, II, and III-------ANS
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.
Select One:
a.I, II, and III--------ANS
b.I and III
c.I and II
d.II and III

72) XML Mapping file offers which of the following?
Select One:
a.Readable Metadata
b.Surrogate key generation strategy
c.Collecion metadata
d.all the listed options---------ANS
e.Column/Table Mapping

73) Which of the following explains about addClass function in the listed options
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
Select One
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 mappping exceeds 25 different databse products at a time.
Which of the following is this called as?
Select One:

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

1.The central artifact in spring javaConfig is the @Configuration-annotated class.State true or False.
ans:true

2.What are the modules of spring web flow?
 a.Spring-faces
 b.Spring-bundling
 c.Spring-container
 d.Spring-webflow

3.XML mapping file offers which of the following?

4.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.
true

5.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

6.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
Ans:Introduction

7.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"/>
 a. The first declared bean MyServiceImpl is missing an id must be named myService
 b. The second declared bean JpaDao is missing an id must be named jpaDao
 c. Answers 1 and 2 are both rights
 d. Answers 1 and 2 are both wrong

ans:b. The second declared bean JpaDao is missing an id must be named jpaDao

8.Which of the following are the best practices for writing spring XML configuration?
 a.Rarely use classpath
 b.Mentioning version numbers in schema reference
 c.Using consistent naming conventions
 d.Reuse bean definitions as much as possible
ans: c.Using consistent naming conventions
 d.Reuse bean definitions as much as possible
best practices:
1) Add a header comment to each configuration file
2) Use consistent naming conventions
3) No version numbers in schema references
4) Prefer setter injection over constructor injection
5) Prefer type over index for constructor argument matching
6) Use shortcut forms over expanded forms
7) Reuse bean definitions as much as possible
8) Always use ids as bean identifiers
9) Try to avoid autowiring
10) Always use classpath prefix
11) Always externalize properties
12) Use dependency-check at the development phase
13) Do not abuse/overuse dependency injection

9.Spring MVC provides better way to seperate which of the following?
 a.Presentation
 b.Tools
 c.Data Access
 d.Bussiness Logic

10.We can use index and type attribute together
State true or **False.**

11.which of the following is Hibernate?
 a.Lightweight
 b.Open Source
 c.ORM
 d.All of the listed
Ans:d

12.Which of the following options about Auto Wiring in spring are correct?
 1.Auto-wiring in spring framework can be performed by configuring xml and auto-wiring with annotation @Autowired.
 2.Auto-wiring beans with xml configuration:I spring framework, you can wire automatically with auto-wiring feature.
 3.To enable auto-wiring just define the "autowire" attribute in <bean> tag.

13.Which of the following parses in xml based on expression and its used extensively in conjuction with XLST?
 a.Xpath parser
 b.SAX parser
 c.STAX Parser
 d.JDOM Parser

14.Length attribute of @column annotation permits the size of the column used to map a value particularly for a string value.
State **true** or False.

15.When we work with an object oriented system there's a mismatch between the object modal and the relational database. State true or False.--=-**- may be false**

16.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

17.- 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
Ans:A

18.Which of the listed statement are correct for spring Bean scope:Prototype?
 1.Spring container creates new instance of bean for each and every request for that bean
 2.Prototype scoped bean is served by creating new instance of bean for each and every bean dependency
 3.After instatiating bean and submitting it to client spring container will maitain the record
 4.Prototype scope is spring standard scope and can be used in standalone as well as web application of spring.

19.ServletWrappingController-Wraps an existing servlet which is managed completely by the spring environment.State true or False.

20.Hibernate session is the main runtime interface between a java application and Hibernate.State true or False.
TRUE
23.Which of the following are correct in sql queries in hibernate.
 1.sql queries may contain named and positional parameters, just like hibernate queries
 2.You may express aquery in sql usig createSQLQuery()

3Hibernate take care of the mapping from result sets to objects
4.You may call session.connection() and use JDBC Connection at any time

24.Which is the query language that embodies a very powerful and flexible mechanism to query, store, update and retrive
objects from a database?
 a.PLSQL
 b.RDBMS
 c.SQL
 d.HQL
Ans:HQL

25.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

26.Which of the listed options are True for bean configuration inheritance?
 1.In spring the inheritance is supported in bean to share common values properties or configurations.
 2.A child bean or inherited bean can inherit its parent bean configurations, properties & some attributes
 3.the parent bean allow to override the inherited values.

27.XsltViewResolver-supports XsltView by resolving the view name of which of the following options?
 a.View name of the URL of the report file
 b.URL of the XSLT
 c.VelocityView and its subclasses
 d.All of the option

28.[xml]
<id name="depId" type="string">
<colum name="columnId" length="30"/>
</id>
[xml]
The above is an example of creating which key?
 a.Primary key
 b.Secondary key
 c.Unique key
 d.

29.When you need to upload a large number of records into your database using Hibernate, you can use batch processing.State true or False.
true
30.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

31.Implementation of viewResolver accets a configuration file written in XML with the same DTD as spring XML bean factories.State true or False.
true
32.Choose the odd one out respect to annotations from the following
 a.@requestmapping
 b.@controller
 c.@responsevalid
 d.@Pathvalid

33.For a fast Development, the depenndency injection feature of spring Framework & support to various Frameworks makes the easy development of javaEE application.state true or False.
true
34.Testing an application written with Spring is complex because environment-dependent code is moved into this framework.state true or **False**.

35.The application is designed around an object model.Sql code is generated at build time & the assosiations between obj are supported by the persistence mechanism, and queries are specified using an obj-oriented expression language.This is best suited for medium-sized applications with some complex transactions.Used when mapping exceeds 25 differentdatabase products at a time.which of the following is this called as?
 a.Object mapping
 b.Application object mapping
 c.Medium object mapping
 d.Expression object mapping

36.Which of the following is not the steps for creating web MVC?
 a.Provide exit controller in the web
 b.Create a controller class
 c.start server 7 deploy the project
 d.Define the bean in the xml file

37.Maven is a project management &comprehension tool.
state true or False.
Ans:True

38.Which of the following elements is used to represent one-to-one relationship in hibernate?

a.<many-to-one>
b.<ManyTOOne>
c.<many-one>
d.none
Ans:<many-to-one>

39.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

40.Spring MVC provides predefined templates for JDBC, Hibernate and JPA.state true or False.
Ans:True

41.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
Ans:org.springframework.web.servlet.DispatcherServlet

42.Which of the following is NOT the type of mapping?
a.Instance mapping
b.Component mapping
c.Association mapping
d.Class mapping

43.Which of the following are 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
Ans: WebSocket, Servlet, Web, Portlet

44.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

45.In spring bean configuration bean atribute 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

46.To validate the form fields you need to have a seperate UserValidator class that implements the validator interface,override the validate() method perform all the validations.state true or False.
false

47.The application context implements which of the following interface that is used to obtain localized messages,with the actual implementation being pluggable?
 1.messageSource
 2.RequestMapping
 3.both
 4.neither

48.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)
Ans: b,c,d

49.What statement is not correct in live environment? Select a unique answer.
 1. Constuctor and properties autowiring in the same bean are not compatible
 2. A bean should have a default or a no-args constructor
 3. The <constructor-arg> tag could take type, name and index to reduce ambiguity
 4. None of the above
 5. All of the above
 Ans:5

50.- 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.

51.Which of the following explains about addclass function in the listed options?
 a.this function translate a java class name into file name
 b.this translated file name is then loaded as an input stream from the java class loader
 c.this addclass function is important if you want efficient usage of classes in your code

52.Spring MVC provides a JSP tag library(Spring form) for making it easier to bind form elements to model data.state true or False.

Ans:True

53.Which of the following is correct assertion about spring?
 a.Spring enables developers to develop enterprise-class applications using POJOs.
 b.Spring is organized in a modular fashion.
 c.Testing an application written with spring is simple because environment-dependent code is moved into this framework.
 d.All of above.
Ans:d

54.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
Ans:d

55.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
Ans:d

56.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();
}
}
1. @Configuration annotation is missing
2. Default or no-arg constructor is missing
3. @Bean name is ambiguous
4. @Bean scope is prototype
Ans:1&2

57.What is true about <list> 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.
Ans:This helps in wiring a list of values, allowing duplicates.

58.Which are the correct implementation classes of ApplicationContext?
 A.FileSystemXmlApplicationContext,ClassPathXmlApplicationContext, WebXmlApplicationContext
 B.FileSystemApplicationContext, ClassPathApplicationContext, WebApplicationContext
 C.AdvancedApplicationContext, FileApplicationContext
 D.FileSystemApplicationContext, ClassPathApplicationContext
Ans:FileSystemXmlApplicationContext,ClassPathXmlApplicationContext, WebXmlApplicationContext

59.It is difficult to inject the dependency by constructor. state true or **False.**

60.The Model-View-Controller(MVC) is an architectural pattern that does not separate an application into three main logical compponents: the model,the view and the controller. state true or **False.**