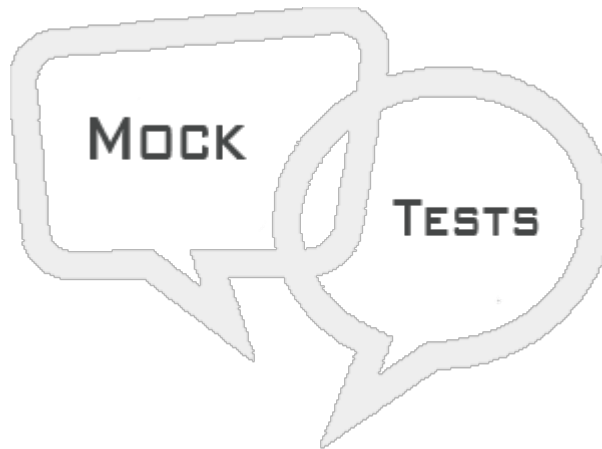


HIBERNATE MOCK TEST

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HIBERNATE MOCK TEST I

Q 1 - What JDBC stands for?

- A - Java DB Connectivity
- B - Java Database Connectivity**
- C - Java Data Bind Connect
- D - Java Data Bind Connector

Q 2 - 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.**

Q 3 - What ORM stands for?

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

Q 4 - 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 5 - Which of the following is not an ORM framework?

A - Castor

B - Spring DAO

C - Hibernate

D - NoSQL

Q 6 - 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 7 - 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 8 - Which of the following database is not supported by Hibernate?

A - DB2/NT

B - MySQL

C - FoundationDB

D - PostgreSQL

Q 9 - Which of the following tools/frameworks provides integration with Hibernate?

A - XDoclet Spring

B - J2EE

C - Maven

D - All of the above.

Q 10 - Which of the following is not a core component of Hibernate?

A - JDBC

B - SessionFactory

C - Session

D - Configuration

Q 11 - Which of the following is not a core component of Hibernate?

A - Transaction

B - Provider

C - Criteria

D - Query

Q 12 - 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 13 - Which of the following object is used to create SessionFactory object in hibernate?

A - Configuration

B - Session

C - SessionFactory

D - Transaction

Q 14 - Which of the following is true about SessionFactory object in hibernate?

A - SessionFactory object configures Hibernate for the application using the supplied configuration file.

B - SessionFactory object allows for a Session object to be instantiated.

C - The SessionFactory is a thread safe object.

D - All of the above.

Q 15 - 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 16 - Which of the following is true about Session object in hibernate?

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

B - The Session object is lightweight.

C - Persistent objects are saved and retrieved through a Session object.

D - All of the above.

Q 17 - Is SessionFactory a thread-safe object?

A - true

B - false

Q 18 - Is Session a thread-safe object?

A - true

B - false

Q 19 - 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 20 - 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 21 - 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 22 - 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 23 - 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.

Q 24 - 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.

Q 25 - Session.beginTransaction method begins a unit of work and returns the associated Transaction object.

- A - true
- B - false

ANSWER SHEET

Question Number	Answer Key
1	B
2	D
3	B
4	C
5	D
6	A

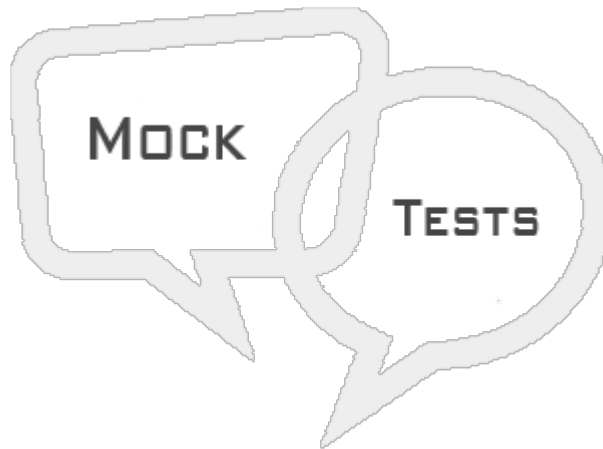
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8	C
9	D
10	A
11	B
12	D
13	A
14	D
15	D
16	D
17	A
18	B
19	D
20	D
21	A
22	D
23	D
24	A
25	A

HIBERNATE MOCK TEST

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HIBERNATE MOCK TEST II

Q 1 - Session.createCriteria creates a new Criteria instance, for the given entity class, or a superclass of an entity class.

A - true

B - false

Q 2 - Session.createQuery creates a new instance of Query for the given HQL query string.

A - true

B - false

Q 3 - Session.createSQLQuery creates a new instance of Query for the given HQL query string.

A - true

B - false

Q 4 - Session.createSQLQuery creates a new instance of Query for the given SQL query string.

A - true

B - false

Q 5 - 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 6 - 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 7 - 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 8 - 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 9 - Which method is used to update the state of the given instance from the underlying database?

A - Session.store

B - Session.keep

C - Session.update

D - Session.load

Q 10 - 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 11 - 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 12 - 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

Q 13 - 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 14 - 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 - primaryKey

D - None of the above.

Q 15 - 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 16 - Which element of hbm.xml automatically generate the primary key values?

A - id

B - generator

C - primaryKey

D - None of the above.

Q 17 - 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 18 - 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 19 - 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 20 - Which of the following element maps java.util.Set property in hibernate?

A - <set>

B - <list>

C - <bag>

D - <map>

Q 21 - Which of the following element maps java.util.List property in hibernate?

A - <set>

B - <list>

C - <bag>

D - <map>

Q 22 - Which of the following element maps java.util.Collection property in hibernate?

A - <set>

B - <list>

C - <bag>

D - <map>

Q 23 - Which of the following element maps java.util.Map property in hibernate?

A - <set>

B - <list>

C - <bag>

D - <map>

Q 24 - Which of the following element maps java.util.SortedMap property in hibernate?

A - <set>

B - <list>

C - <bag>

D - <map>

Q 25 - Which of the following element is used to represent many-to-one relationship in hibernate?

A - <many-to-one>

B - <many-one>

C - <ManyToOne>

D - None of the above

ANSWER SHEET

Question Number	Answer Key
-----------------	------------

1	A
---	---

2	A
---	---

3	B
---	---

4	A
---	---

5	A
---	---

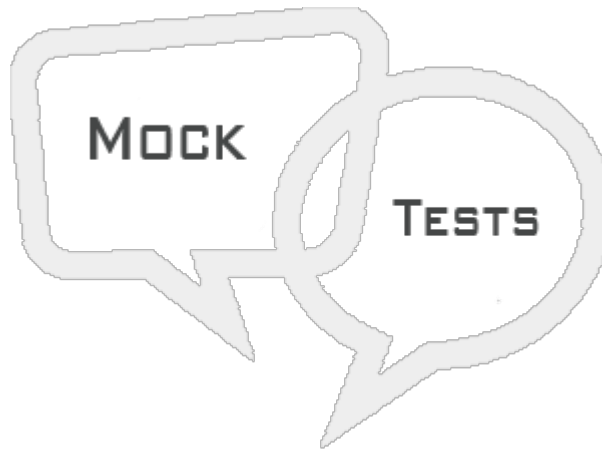
6	B
7	A
8	C
9	C
10	A
11	A
12	C
13	D
14	A
15	D
16	B
17	C
18	C
19	D
20	A
21	B
22	C
23	D
24	D
25	A

HIBERNATE MOCK TEST

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HIBERNATE MOCK TEST III

Q 1 - Which of the following element is used to represent one-to-one relationship in hibernate?

- A - `<many-to-one>`
- B - `<many-one>`
- C - `<ManyToOne>`
- D - None of the above.

Q 2 - 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 3 - Which of the following element is used to represent many-to-many relationship in hibernate?

- A - `<many-to-many>`
- B - `<many-many>`
- C - `<ManyToMany>`
- D - None of the above.

Q 4 - 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 5 - 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 6 - 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.

Q 7 - 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 8 - 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 9 - What is value of lazy loading by default?

A - true

B - false

Q 10 - 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 11 - What HQL stands for?

A - Hibernate Query Language

B - High Query Language

C - Hybrid Query Language

D - None of the above.

Q 12 - 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.

Q 13 - 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 14 - Whis of the following is true about first level cache in hibernate?

A - The first-level cache is the Session cache.

B - The first-level cache is a mandatory cache through which all requests must pass.

C - The Session object keeps an object under its own power before committing it to the database.

D - All of the above.

Q 15 - 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 16 - Whis 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.

Q 17 - Is first level caching mandatory in hibernate?

- A - true
- B - false

Q 18 - Is second level caching mandatory in hibernate?

- A - true
- B - false

Q 19 - Is query level caching mandatory in hibernate?

- A - true
- B - false

Q 20 - 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.

Q 21 - Which of the following is true about query level cache in hibernate?

- A - Query level cache is an optional feature.
- B - Query level cache requires two additional physical cache regions that hold the cached query results and the timestamps when a table was last updated.
- C - Query level cache is only useful for queries that are run frequently with the same parameters.
- D - All of the above.

Q 22 - Which of the following is a concurrency strategies in hibernate?

- A - Transactional
- B - Read-write
- C - Nonstrict-read-write.
- D - All of the above.

Q 23 - 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 24 - 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 25 - When a Nonstrict-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.

ANSWER SHEET

Question Number	Answer Key
-----------------	------------

- | | |
|---|---|
| 1 | A |
| 2 | A |
| 3 | A |
| 4 | A |
| 5 | A |
| 6 | C |

7	D
8	A
9	A
10	B
11	A
12	D
13	A
14	D
15	A
16	D
17	A
18	B
19	B
20	A
21	D
22	D
23	B
24	B
25	C

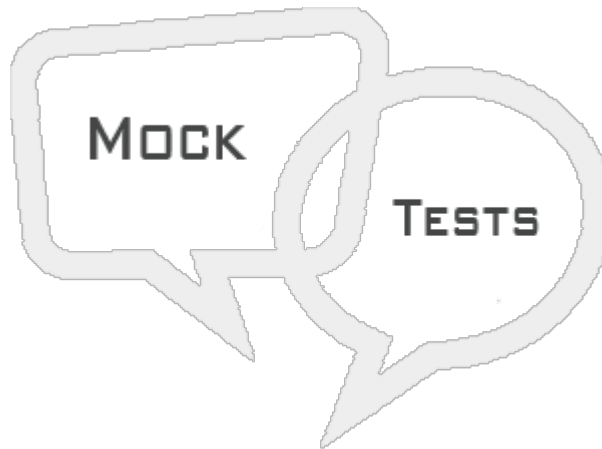
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HIBERNATE MOCK TEST

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HIBERNATE MOCK TEST IV

Q 1 - 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 2 - Which of the following is true with respect to ORM vs JDBC?

- A - ORM system lets business code access objects rather than DB tables.
- B - ORM system hides details of SQL queries from OO logic.
- C - ORM system helps in Transaction management and automatic key generation.
- D - All of the above.

Q 3 - Which of the following is true about hibernate?

- A - Hibernate does not require an application server to operate.
- B - Hibernate manipulates Complex associations of objects of your database.
- C - Hibernate minimize database access with smart fetching strategies.
- D - All of the above.

Q 4 - Which of the following database is not supported by Hibernate?

- A - Oracle

B - Microsoft SQL Server Database

C - FoundationDB

D - Informix Dynamic Server

Q 5 - Which of the following database is supported by Hibernate?

A - DB2/NT

B - PostgreSQL

C - Sybase SQL Server

D - All of the above

Q 6 - Which of the following is a core component of Hibernate?

A - Transaction

B - SessionFactory

C - Session

D - All of the above

Q 7 - Configuration object is used to create SessionFactory object in hibernate.

A - true

B - false

Q 8 - The SessionFactory is heavyweight object.

A - false

B - true

Q 9 - You would need one SessionFactory object per database using a separate configuration file.

A - false

B - true

Q 10 - A Session is used to get a physical connection with a database.

A - true

B - false

Q 11 - The Session object is lightweight.

A - false

B - true

Q 12 - Persistent objects are saved and retrieved through a Session object.

A - false

B - true

Q 13 - 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 14 - 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 15 - 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 16 - Which of the following is true about @Table annotation?

A - The @Table annotation allows to specify the details of the table that will be used to persist the entity in the database.

B - The @Table annotation allows to override the name of the table, its catalogue, and its schema, and enforce unique constraints on columns in the table.

C - Both of the above.

D - None of the above.

Q 17 - 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 18 - 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 19 - name attribute of @Column annotation permits the name of the column to be explicitly specified.

- A - true
- B - false

Q 20 - 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

Q 21 - nullable attribute of @Column annotation permits the column to be marked NOT NULL when the schema is generated.

- A - true
- B - false

Q 22 - 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 23 - 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 24 - 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 25 - 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.

ANSWER SHEET

Question Number	Answer Key
-----------------	------------

1	C
2	D
3	D
4	C
5	D
6	D
7	A
8	B
9	B
10	A
11	B
12	B
13	C
14	C
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16	C

17	C
18	A
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20	B
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22	C
23	C
24	C
25	A

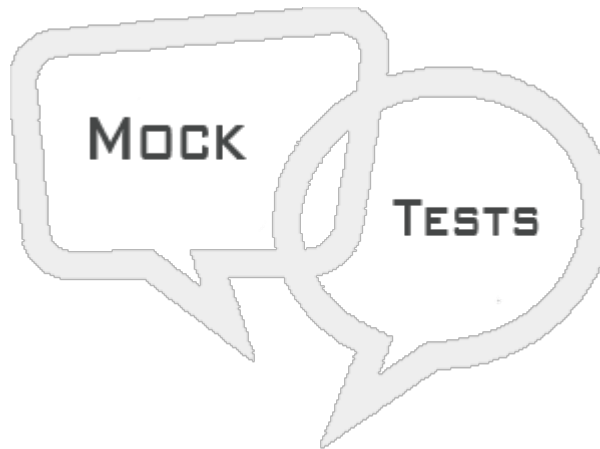
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SPRING MOCK TEST

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SPRING MOCK TEST I

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.

Q 2 - 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.

Q 3 - 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.

Q 4 - 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 5 - What AOP stands for?

- A - Aspect Oriented Programming
- B - Any Object Programming
- C - Asset Oriented Programming
- D - Asset Oriented Protocol

Q 6 - 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 7 - 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 8 - 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 9 - 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 10 - 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 11 - 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 12 - 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.

Q 13 - What types of Dependency injection does spring supports?

A - Constructor based, Setter based

B - Constructor based, Setter based, Getter Based

C - Setter based, Getter based, Properties based

D - Constructor based, Setter based, Properties based

Q 14 - Which are the IoC containers in Spring?

A - BeanFactory, ApplicationContext

B - BeanFactory, ApplicationContext, IoCContextFactory

C - BeanFactory, BeanContext, IoCContextFactory

D - BeanFactory, ApplicationContext, BeanContext

Q 15 - Which is the correct implementation class of BeanFactory?

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

Q 16 - Which are the correct implementation classes of ApplicationContext?

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

Q 17 - 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 18 - 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 19 - 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.

Q 20 - 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 21 - 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 22 - 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.

Q 23 - 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.

Q 24 - 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 25 - What is default scope of bean in Spring framework?

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

Q 26 - 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 27 - 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 28 - 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 29 - 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 30 - 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 31 - What is bean autowiring?

A - Autowiring lets Spring resolve collaborators *otherbeans* 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 32 - 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 33 - 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 34 - 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.

Q 35 - What is byType mode of autowiring?

A - Default setting which means no autowiring and you should use explicit bean reference for wiring.

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

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

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

Q 36 - 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 37 - 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 38

Can you inject null and empty string values in Spring?

A - Yes

B - No

Q 39 - 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 40 - 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 41 - 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 42 - 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 43 - 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 44 - 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.

Q 45 - 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 46 - 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 47 - 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 48 - 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 49 - 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 50 - 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 SHEET

Question Number	Answer Key
-----------------	------------

- | | |
|---|---|
| 1 | A |
| 2 | D |
| 3 | A |
| 4 | A |
| 5 | A |
| 6 | A |
| 7 | A |
| 8 | A |

9	A
10	D
11	D
12	D
13	A
14	A
15	A
16	A
17	D
18	D
19	A
20	A
21	A
22	A
23	A
24	A
25	A
26	A
27	A
28	B
29	C
30	D
31	A
32	A
33	A
34	B
35	D
36	D
37	C
38	A
39	D
40	C
41	B
42	D
43	C

44	B
45	D
46	C
47	B
48	D
49	C
50	B

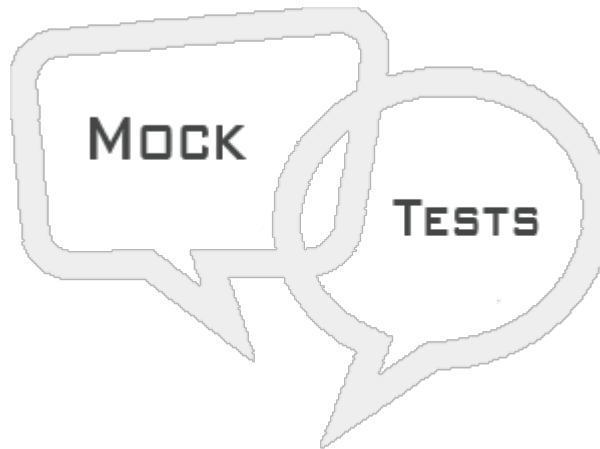
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SPRING MOCK TEST

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This section presents you various set of Mock Tests related to **Spring Framework**. You can download these sample mock tests at your local machine and solve offline at your convenience. Every mock test is supplied with a mock test key to let you verify the final score and grade yourself.



SPRING MOCK TEST III

Q 1 - 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 2 - 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 3 - 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 4 - 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 5 - 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 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.

Q 7 - 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 8 - 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 9 - 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 10 - 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.

Q 11 - 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 12 - 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 13 - 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 14 - 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 15 - Which ORM Spring supports ?

A - Hibernate

B - iBatis

C - JPA

D - All of above.

E - None of above.

Q 16 - Which of the following database is not supported using jdbcTemplate?

A - MySql

B - PostgresSql

C - NoSql

D - Oracle

Q 17 - How to get object of a service in spring framework?

A - Using new keyword

B - Using dependency injection

Q 18 - Which of the following is part of Data Access layer in Spring framework?

A - Beans

B - Aspects

C - JMS

D - Context

Q 19 - 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 20 - Core container has AOP as one of its module.

A - True

B - False

Q 21 - SpEL is part of core container.

A - False

B - True

Q 22 - Which class acts as IoC Container?

A - ServletContext

B - DispatcherServlet

C - ApplicationContext

D - None of the above

Q 23 - What stands true for spring framework?

A - Spring framework is a light weight framework.

B - Spring framework is a heavy weight framework.

Q 24 - Expression Language/ SpEL was introduced in which version of spring framework.

A - 1.0

B - 2.0

C - 3.0

D - 4.0

Q 25 - Can we integrate Struts with Spring.

A - Yes

B - No

Q 26 - By default a bean is lazily loaded.

A - True

B - False

Q 27 - By default a bean is eagerly loaded.

A - False

B - True

Q 28 - If a bean is scoped to HTTP request, scope is

A - session

B - global-session

C - prototype

D - request

Q 29 - If a bean is created once per loc Container, scope is

A - singleton

B - global-session

C - prototype

D - request

Q 30 - Thread scoped bean is introduced in which version of spring framework.

A - 1.0

B - 2.0

C - 3.0

D - 4.0

Q 31 - If a bean can be created any number of times, scope is

A - session

B - global-session

C - prototype

D - request

Q 32 - What is the scope of stateless bean?

A - global-session

B - singleton

C - prototype

D - request

Q 33 - What is the scope of stateful bean?

A - session

B - global-session

C - prototype

D - request

Q 34 - If a bean is scoped to HTTP session, scope is

A - global-session

B - session

C - prototype

D - request

Q 35 - How to handle shut down of IoC container?

- A - Using shutdownHook
- B - Using shutdownHandler
- C - Using registerHook
- D - Using registerShutdownHook

Q 36 - 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 37 - What is the scope of bean in portlet context?

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

Q 38 - 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 39 - Which class is used to map a database row to a java object in spring?

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

Q 40

- A bean must have id attribute in beans configuration file.
- A - True

B - False

Q 41 - Which of the following class can be used to execute Sql queries in spring?

B - JDBCHelper

A - JdbcTemplate

C - DBHelper

D - DBTemplate

Q 42 - Which of the following class can be used to call Stored Procedures in spring?

A - SPHelper

B - JdbcTemplateCall

C - JdbcTemplate

D - SimpleJdbcCall

Q 43 - 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 44 - 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 45 - 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 46 - 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 47 - 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 48 - Can be bean be configured to have an inner bean?

A - True

B - False

Q 49 - Can we inject value and ref both together in a bean?

A - True

B - False

Q 50 - Following class can be extended to create custom event in spring.

A - SpringEvent

B - Event

C - ApplicationEvent

D - None of above

ANSWER SHEET

Question Number	Answer Key
-----------------	------------

1	D
2	B
3	B
4	D
5	D
6	B
7	B
8	A

9	A
10	C
11	C
12	B
13	A
14	C
15	D
16	C
17	B
18	C
19	C
20	B
21	B
22	C
23	A
24	C
25	A
26	B
27	B
28	D
29	A
30	C
31	C
32	B
33	C
34	B
35	D
36	D
37	B
38	A
39	B
40	B
41	A
42	D
43	C

44	C
45	B
46	B
47	B
48	A
49	A
50	C

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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

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

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-----

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 separate which of the following?

- a.Presentation
- b.Tools
- c.Data Access
- d.Business Logic -----

10.We can use index and type attribute together

State true or False. -true

11.which of the following is Hibernate?

- a.Lightweight
- b.Open Source
- c.ORM
- d.All of the listed-----

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:In 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 parsers in xml based on expression and its used extensively in conjunction with XSLT?

- 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. ----true

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.

----true

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

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(not maintain)

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.

-----true

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 a query in sql using createSQLQuery()-----

3. Hibernate takes 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 retrieve

objects from a database?

a. PLSQL

b. RDBMS

c. SQL

d. 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-view-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">  
<column name="columnId" length="30"/>  
<generator/>  
</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.--false (simple)

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 & 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.-----true

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

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

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

- a. Prototype----
- b. Session

c.Singleton

d.Global session

46.To validate the form fields you need to have a separate UserValidator class

that implements the validator interface,override the validate() method perform all the validations.state true or False.

-----true

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)-----

49.What statement is not correct in live environment? Select a unique answer.

1. Constructor 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-----

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.-----

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-----

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-----

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

57.What is true about <list> collection configuration elements?

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

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

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

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

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

59.It is difficult to inject the dependency by constructor. state true or False.---true

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

state true or False.-----false

1)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

```

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

```

The above is an example of creating which key?

Select One:

- a.DB key
- b.Unique key
- c.Secondary key
- d.Primary key-----ANS

3)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

4).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>

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

select one

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

6) Which of the following is not available in HQL

select one

a) Select

b) Where

c) Sub-----Ans

d) Having

7) maven is a project management and comprehension tool

select one

True-----Ans

False

8) How many layers are there in Hibernate architecture

select one

a) 3

b) 4-----Ans

c) 5

d) 2

9) Beans, Core, Context, spEL are the components in Core container

select one

True-----Ans

False

10) PROPAGATION_REQUIRES_NEW

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

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

select one

a)<list>

b)<set>

c)<map>-----ANS

d)<props>

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

select one

a)<list>

b)<set>

c)<map>

d)<props>-----ANS

13)which type of annotation applies to bean property setter methods

select one

a)@Requires

b)@Resource

c)@Required-----ANS

d)@Requiring

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

select one

True-----Ans

False

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

select one

a)oldgen

b)younggen

c)Middlegen-----ANS

d) Mediumgen

16)Java based configuration option disables you to write most of your Spring configuration without XML but with the help of few Java-based annotations

select one

True

False-----Ans

17) What types of views supported by spring MVC for different presentation technologies

select one or more

- a)JSP
- b)HTML
- c)velocity templates
- d)

Ans: select all

18)Spring is a heavy weight framework

select one

True

False-----Ans

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

select one

a)PLSQL

b)HQL-----ANS

c)SQL

d)RDBMS

20)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

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 instances can be created for a global session : one

11) what displays 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 available in HQL?

select

where

having

sub-----ans

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.---ans

B - Hibernate is an Object-Relational Mapping(ORM) solution for .NET

C - Both of the above.

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 parsers 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,WebxmlApplicationContext(answers
are confusing- xml should be common in those three)

31) org.springframework.web.servlet.DispatcherServlet is the configuration 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 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

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 ---true

38)[xml]

```
<id name="deptId" type="string">  
<column name="columnid" length="30"/>  
</generatoers/>
```

<id/>

[/xml]

The above is an example of creating 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---ans

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 separate three modules like presentation layer, business layer and data access layer
State True or False

a). TRUE

b). FALSE-----ANS

50) pick odd one out in the following annotations

I. @PathVariable ----- ans

II. @ResponseBody ---ans

III. @Controller

IV. @RequestMapping

51) length returns number of rows in a column for only string type

State True or False

a). TRUE---ans

b). FALSE

52)which level cache implements a cache for query resultsets

- a.Third level cache---ans
- 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---ans
- 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(

bundling not an ans

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 practice?

I.Exit controller has to define in web.xml

II.bean definition

III.open the server and deploy the project----ans|not sure

IV.@controller usage

59.Constructor injection is didfficult to inject

State True or False

a). TRUE--ans

b). FALSE

60.index and type can be used in the constrictor-arg at the same time?

State True or False

a). TRUE---ans

b). FALSE

61.Which of the following is a one to one relationship

a) <many-to-many>

b) <many-to-one>-----ans in tutorial point

c) None of the list

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)URI 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 separate 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.Coleccion 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--ans
- b. I and III
- c. I and II
- d. II and III

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

Which of the following is this called as?

Select One:

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

Expected Questions:

1). In Spring AOP, 4 type of advices are supported :

before-----Run advice before the method execution.

after-----Run advice after the method execution, regardless of its outcome.

after-returning advice-----Run advice after the method execution, only if the method completes successfully.

after-throwing advice-----Run advice after the method execution, only if the method exits by throwing an exception.

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

2). ResourceLoader support: Spring's Resource interface us a flexible generic abstraction for handling low-level resources. An application context itself is a ResourceLoader, Hence provides an application with access to deployment-specific Resource instances.

MessageSource support: The application context implements MessageSource, an interface used to obtain localized messages, with the actual implementation being pluggable.

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

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

4). Spring framework architecture:

Data Access/Integration--JDBC,ORM,OXM,JMS, Transactions

Web(MVC/Remoting)--WebSocket,Servlet,Web, Portlet

AOP

Aspects

Instrumentation

Messaging

Core container--Beans,Core, Context,spEL

Test

5)

Spring BeanFactory Container-org.springframework.beans.factory.BeanFactoryinterface.

Spring ApplicationContext Container-org.springframework.context.ApplicationContext

6) Bean Scopes:

Scope	Description
singleton instance per Spring IoC container (default).	This scopes the bean definition to a single
prototype number of object instances.	This scopes a single bean definition to have any
request request. Only valid in the context of a web-aware Spring ApplicationContext.	This scopes a bean definition to an HTTP
session session. Only valid in the context of a web-aware Spring ApplicationContext.	This scopes a bean definition to an HTTP
global-session session. Only valid in the context of a web-aware Spring ApplicationContext.	This scopes a bean definition to a global HTTP

7) Spring-Injecting Collection:

Element	Description
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<list>	This helps in wiring i.e., injecting a list of values, allowing duplicates.
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<set>	This helps in wiring a set of values but without any duplicates.
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<map>	This can be used to inject a collection of name-value pairs where the name and the value can be of any type.
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<props>	This can be used to inject a collection of name-value pairs where the name and the value are both Strings.
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8) Autowiring Modes:

Mode	Description
no	This is a default setting which means no autowiring and you should use explicit bean reference for wiring. You have to do nothing special for this wiring. This is what you already have seen in Dependency Injection chapter.
byName	Autowiring by property name. Spring container looks at the properties of the beans on which autowire attribute is set to byName in the XML configuration file. It then tries to match and wire its properties with the beans defined by the same names in the configuration file.
byType	Autowiring by property datatype. Spring container looks at the properties of the beans on which autowire attribute is set to byType in the XML configuration file. It then tries to match and wire a property if its type matches with exactly one of the beans name in the configuration file. If more than one such beans exists, a fatal exception is thrown.

constructor Similar to byType, but this 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.

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

Autowiring Limitations:

Limitations	Description
Overriding possibility <constructor-arg> and <property> settings which will always override autowiring.	You can still specify dependencies using
Primitive data types properties such as primitives, Strings, and Classes.	You cannot autowire so-called simple
Confusing nature possible prefer using explicit wiring.	Autowiring is less exact than explicit wiring, so if

9) @Required-----The @Required annotation applies to bean property setter methods

@Autowired-----The @Autowired annotation can apply to bean property setter methods, nonsetter methods, constructor and properties.

@Qualifier-----The @Qualifier annotation along with @Autowired can be used to remove the confusion by specifying which exact bean will be wired.

JSR-250 Annotations----Spring supports JSR-250 based annotations which include @Resource, @PostConstruct and @PreDestroy annotations.(Go through these annotations also)

10) @Configuration-----indicates that the class can be used by the Spring IoC container as a source of bean definitions.

@Bean-----annotation tells Spring that a method annotated with @Bean will return an object that should be registered as a bean in the Spring application context

@Import-----annotation allows for loading @Bean definitions from another configuration class

11) Spring Event Handling:

ContextRefreshedEvent-----This event is published when the ApplicationContext is either initialized or refreshed. This can also be raised using the refresh() method on the ConfigurableApplicationContext interface.

ContextStartedEvent-----This event is published when the ApplicationContext is started using the start() method on the ConfigurableApplicationContext interface. You can poll your database or you can restart any stopped application after receiving this event.

ContextStoppedEvent-----This event is published when the ApplicationContext is stopped using the stop() method on the ConfigurableApplicationContext interface. You can do the required housekeep work after receiving this event.

ContextClosedEvent-----This event is published when the ApplicationContext is closed using the close() method on the ConfigurableApplicationContext interface. A closed context reaches its end of life; it cannot be refreshed or restarted.

RequestHandledEvent-----This is a web-specific event telling all beans that an HTTP request has been serviced.

12) AOP Terminologies:

Terms	Description
Aspect	This is a module which has a set of APIs providing cross-cutting requirements. For example, a logging module would be called AOP aspect for logging. An application can have any number of aspects depending on the requirement.
Join Point	This represents a point in your application where you can plug-in the AOP aspect. You can also say, it is the actual place in the application where an action will be taken using Spring AOP framework.
Advice	This is the actual action to be taken either before or after the method execution. This is an actual piece of code that is invoked during the program execution by Spring AOP framework.
Pointcut	This is a set of one or more join points where an advice should be executed. You can specify pointcuts using expressions or patterns as we will see in our AOP examples.

Introduction
or attributes to the existing classes.

An introduction allows you to add new methods

Target Object
aspects. This object will always be a proxied object, also referred to
as the advised object.

The object being advised by one or more

Weaving
aspects with other application types or objects to create an advised object.

This can be done at compile time, load time, or at runtime.

Weaving is the process of linking

13) Custom Aspects Implementation:

Approach	Description
XML Schema based regular classes along with XML based configuration.	Aspects are implemented using the
@AspectJ based declaring aspects as regular Java classes annotated with Java 5 annotations.	@AspectJ refers to a style of

14) Spring Transaction Management:

ACID:

Atomicity: A transaction should be treated as a single unit of operation, which means either the entire sequence of operations is successful or unsuccessful.

Consistency: This represents the consistency of the referential integrity of the database, unique primary keys in tables, etc.

Isolation: There may be many transaction processing with the same data set at the same time. Each transaction should be isolated from others to prevent data corruption.

Durability: Once a transaction has completed, the results of this transaction have to be made permanent and cannot be erased from the database due to system failure.

Methods and description:

<code>TransactionStatus getTransaction(TransactionDefinition definition)</code> active transaction or creates a new one, according to the specified propagation behavior.	This method returns a currently active transaction or creates a new one, according to the specified propagation behavior.
<code>void commit(TransactionStatus status)</code> transaction, with regard to its status.	This method commits the given transaction, with regard to its status.
<code>void rollback(TransactionStatus status)</code> rollback of the given transaction.	This method performs a rollback of the given transaction.
<code>int getPropagationBehavior()</code> propagation behavior. Spring offers all of the transaction propagation options familiar from EJB CMT.	This method returns the propagation behavior. Spring offers all of the transaction propagation options familiar from EJB CMT.

<code>int getIsolationLevel()</code> to which this transaction is isolated from the work of other transactions.	This method returns the degree
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<code>String getName()</code> of this transaction.	This method returns the name
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<code>int getTimeout()</code> seconds in which the transaction must complete.	This method returns the time in
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<code>boolean isReadOnly()</code> the transaction is read-only.	This method returns whether
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15)

isolation levels:

<code>TransactionDefinition.ISOLATION_DEFAULT</code> isolation level.	This is the default
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<code>TransactionDefinition.ISOLATION_READ_COMMITTED</code> reads are prevented; non-repeatable reads and phantom reads can occur.	Indicates that dirty
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<code>TransactionDefinition.ISOLATION_READ_UNCOMMITTED</code> reads, non-repeatable reads, and phantom reads can occur.	Indicates that dirty
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<code>TransactionDefinition.ISOLATION_REPEATABLE_READ</code> reads and non-repeatable reads are prevented; phantom reads can occur.	Indicates that dirty
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TransactionDefinition.ISOLATION_SERIALIZABLE	Indicates that dirty reads, non-repeatable reads, and phantom reads are prevented.
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16) propagation types:

TransactionDefinition.PROPAGATION_MANDATORY	Supports a current transaction; throws an exception if no current transaction exists.
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TransactionDefinition.PROPAGATION_NESTED	Executes within a nested transaction if a current transaction exists.
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TransactionDefinition.PROPAGATION_NEVER	Does not support a current transaction; throws an exception if a current transaction exists.
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TransactionDefinition.PROPAGATION_NOT_SUPPORTED	Does not support a current transaction; rather always execute nontransactionally.
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TransactionDefinition.PROPAGATION_REQUIRED	Supports a current transaction; creates a new one if none exists.
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TransactionDefinition.PROPAGATION_REQUIRES_NEW	Creates a new transaction, suspending the current transaction if one exists.
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TransactionDefinition.PROPAGATION_SUPPORTS	Supports a current transaction; executes non-transactionally if none exists.
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TransactionDefinition.TIMEOUT_DEFAULT	Uses the default timeout of the underlying transaction system, or none if timeouts are not supported.
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