

CDAC
Section 2 of 2

PG-DAC_0921_240322

31 32 33 34 35 36 37 38 39 40 < 39 of 40 > All 38

Revisit

Choose the best option

Cascade mode attributes can be specified for the association annotations (like @OneToMany) in an entity

The cascading direction is from the target entity to the source entity

PERSIST, DELETE are the only valid cascading mode attributes

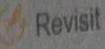
Cascading is not supported in JPA

Ans A

Cascade mode attributes can be specified for the association annotations (like @OneToMany) in an entity bean

Question # 8

Which of the following can be used to test APIs in web service?



Choose the best option

- Postback tool
- Writing Web application using RestTemplate
- Writing web application using RestManager
- Writing web application using RestMan

Ans

B(please re confirm)

Choose the best option

Question # 32

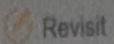
Which level of cache is represented by Hibernate Session object?

- First Level Cache
- Second Level Cache
- Query Cache
- Database Cache

Ans B

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

Question # 23



Choose the best option

- jsp:plugin
- jsp:include
- jsp:useProperty
- jsp:useBean

Ans C

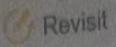
jsp:forward	forwards the request and response to another resource.
jsp:include	includes another resource.
jsp:useBean	creates or locates bean object.
jsp:setProperty	sets the value of property in bean object.
jsp:getProperty	prints the value of property of the bean.
jsp:plugin	embeds another components such as applet.
jsp:param	sets the parameter value. It is used in forward and include mostly.
jsp:fallback	can be used to print the message if plugin is working. It is used in jsp:plugin.



Section 2 of 2

Question # 4

How would you configure a RESTful URL parameter that supports a search for a book based on its ID?



Choose the best option

- GET /{id}/books/
- GET /books/{id}
- GET /book?id={id}
- GET /books?id={id}

Ans B

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11 12 13 14 15 16 17 18 19 20 < 20 of 40 > All

Sी.ডেক
CDAC
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Revisit

Choose the best option

Question # 20

How many ServletContext objects are available for an entire web application?

- One each per servlet
- One each per request
- One each per response
- Only one

Ans D

There's only **one** ServletContext for an entire web app, and all the parts of the web app share it. But each servlet in the app has its own ServletConfig. The Container makes a ServletContext when a web app is deployed, and makes the context available to each Servlet and JSP (which becomes a servlet) in the web app.

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CDAC
Section 2 of 2

1 2 3 4 5 6 7 8 9 10 < 6 of 40 > All 6

Revisit

Question # 6

Identify which of the following types of JDBC drivers makes use of the database native protocol.

Choose the best option

- JDBC-ODBC Bridge plus ODBC driver
- Native-API, partly Java driver
- JDBC-Net, pure Java driver
- Native-protocol, pure Java driver

Ans C

Native-protocol, pure Java driver, uses database native protocol.

The screenshot shows a mobile application interface. At the top left is the CDAC logo with the text "स्टीडैक" and "CDAC". Below it says "Section 2 of 2". At the top center is the text "PG-DAC_0921_240322". At the top right are navigation icons for "Total" (with a clock icon), "Sec", "All", and page numbers 31 through 40. A "Revisit" button with a circular arrow icon is also at the top right. The main content area contains a question: "Question # 40 Which of the following is not a valid phase in maven default build lifecycle?". To the right of the question is a section titled "Choose the best option" with four radio buttons: "clean", "validate", "compile", and "install". The "validate" option is highlighted with a red border.

Question # 40
Which of the following is not a valid phase in maven default build lifecycle?

Choose the best option

clean

validate

compile

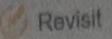
install

Ans A

- **validate** - validate the project is correct and all necessary information is available
- **compile** - compile the source code of the project
- **test** - test the compiled source code using a suitable unit testing framework. These tests should not require the code be packaged or deployed
- **package** - take the compiled code and package it in its distributable format, such as a JAR.
- **verify** - run any checks on results of integration tests to ensure quality criteria are met
- **install** - install the package into the local repository, for use as a dependency in other projects locally
- **deploy** - done in the build environment, copies the final package to the remote repository for sharing with other developers and projects.

Question # 15

When it comes to the Initialization phase of the JSP life cycle, which of the following is true?

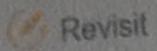


Choose the best option

- When a container loads a JSP it invokes the `jsplinit()` method before `_jspService()`
- Container invokes `_jspService()` method during Initialization phase
- Both of the above
- None of the above



Ans A



Question # 30

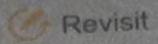
How is the dynamic interception of requests and responses to transform the information done?

Choose the best option

- servlet container
- servlet config
- servlet context
- servlet filter

Ans D

A filter is an object used to intercept the HTTP requests and responses of your application



Question # 37

Which of these JDBC mechanisms allows us to define checkpoints for a transaction?

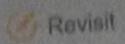
Choose the best option

- CheckPoint
- CommitPoint
- Savepoint
- RollbackPoint

Ans C

Question # 14

What is a POM file in a Maven project?

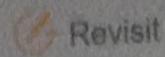


Choose the best option

- A file that contains the compiled bytecode of the classes in your project
- A package that stores resources like images for the Java project
- A file that points to the media resources used by a Java project
- A file that stores the structure and dependencies for your Maven project

Ans D

A Project Object Model or POM is the fundamental unit of work in Maven. It is an XML file that contains information about the project and configuration details used by Maven to build the project.



Choose the best option

Question # 34

Which of the following annotation is recommended for partial update of resource in Spring boot rest controller?

- @GetMapping
- @PostMapping
- @PutMapping
- @PatchMapping

Ans D

PATCH is used when you want to apply a partial update to the resource and **@PatchMapping** annotation for mapping HTTP PATCH requests onto specific handler methods

Question # 18

Assume you have a servlet class with an HttpServletRequest object called myReq. Your servlet has extracted the details from the incoming request and needs to forward it to a servlet accessible at the URL "processingservlet". Which step do you need to carry out before you forward the request over to the next servlet?

Revisit

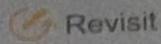
Choose the best option

- HttpServletResponse resp = myReq.next("processingservlet");
- RequestDispatcher rd = myReq.getRequestDispatcher("processingservlet");
- HttpServletRequest nextReq = myReq.next("processingservlet");
- HttpServlet httpServ = myReq.next("processingservlet");

Ans A(please reconfirm

Question # 27

In hibernate, _____ annotation is used to represent primary key



Choose the best option

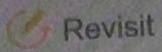
- @Id
- @GeneratedValue
- @Entity
- @Key

Ans A

Each entity bean will have a primary key, which you annotate on the class with the **@Id** annotation. The primary key can be a single field or a combination of multiple fields depending on your table structure.

Question #9

Which of the following annotation is used in JPA to link two tables through a relation table?



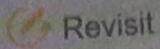
Choose the best option

- @JoinTable
- @LinkTable
- @RelationTable
- @JoinColumn

Ans A

Question # 22

Which of the following, cannot be supplied as automatic configuration in Spring Boot?



Revisit

Choose the best option

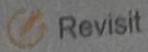
- Request Handler
- Dispatcher Servlet
- View Resolver
- Handler Mapping

Spring-based application requires a lot of configuration. When we use Spring MVC, we need to configure **dispatcher servlet, view resolver, web jars** among other things.

Ans D

Question # 17

In SpringBoot application the class which has main method, should be annotated with _____.

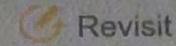


Choose the best option

- @EnableSpringApplication
- @SpringApplication
- @SpringBootApplication
- @EnableSpringBootApplication



Ans C

Question # 16

The return type of `getParameterNames()` of `HttpServletRequest` object is:

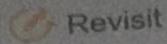
Choose the best option

- Array of Strings
- `java.util.ArrayList`
- `java.util.Enumeration`
- String

Ans C

```
java.util.Enumeration<java.lang.String> getParameterNames()
```

`getParameterNames`. Returns an **Enumeration of String objects containing the names of the parameters contained in this request**. If the request has no parameters, the method returns an empty Enumeration .



Question # 7

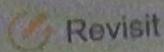
Which of the following annotation is applied on the unique Id of an entity to get its value generated?

Choose the best option

- @Generator
- @GeneratedValue
- @IdGenerator
- @Sequence

Ans B

@Id: This annotation specifies the primary key of the entity. **@GeneratedValue**: This annotation is used to specify the primary key generation strategy to use. i.e Instructs database to generate a value for this field automatically



Choose the best option

Question # 11

Which of the following annotation in JPA, is used to specify primary key – foreign key relation between two entities?

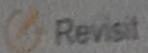
- JoinColumn
- IdClass
- EmbeddedId
- MapId

Ans A

[@JoinColumn](#) is used to specify a column for joining an entity association or element collection. This annotation indicates that the enclosing entity is the owner of the relationship and the corresponding table has a foreign key column which references to the table of the non-owning side

Question # 31

Which of the following problems can be solved using Lookup Method Injection in Spring?



Choose the best option

- Singleton to Prototype dependency
- Prototype to Singleton dependency
- Singleton to Singleton dependency
- Prototype to Prototype dependency

Ans A



Question # 35

The ability to invoke a RESTful method multiple times without changing the state of the server on subsequent invocations is known as:

- Idempotence
- Immutability
- Statefulness
- Uniformity

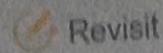
Ans A

The ability to invoke a RESTful method multiple times without changing the state of the server on subsequent invocations is known as: **Idempotence**

Immutable objects can be useful in **multi-threaded applications**. Multiple threads can act on data represented by immutable objects without concern of the data being changed by other threads. Immutable objects are therefore considered more thread-safe than mutable objects.

If the web server stores this data in a backend manner and uses it to identify you as a constantly connected client, the service is stateful.

Uniformity-Each method in this interface operates on one and only one resource. The syntax and the meaning of each method do not change from application to application or from resource to resource



Choose the best option

Question # 26

Which of the following is not a valid attribute of <jsp:useBean> Action tag?

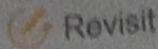
- id
- class
- type
- property

Ans D

id: is used to identify the bean in the specified scope.

class: instantiates the specified bean class (i.e. creates an object of the bean class) but it must have no-arg or no constructor and must not be abstract

type: provides the bean a data type if the bean already exists in the scope. It is mainly used with class or beanName attribute. If you use it without class or beanName, no bean is instantiated.



Question # 24

Which of the following method is best suited to call on JDBC connection object, in the scenario where same SQL statement needs to be executed frequently with different parameters?

Choose the best option

- createStatement()
- prepareStatement()
- prepareCall()
- nativeSQL()

Ans B

The PreparedStatement interface extends the Statement interface it represents a precompiled SQL statement which can be executed multiple times. This accepts parameterized SQL queries and you can pass 0 or more parameters to this query

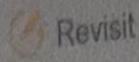
Create a Statement: From the connection interface, you can create the object for this interface. It is generally used for general-purpose access to databases and is useful while using static SQL statements at runtime.

You can create an object of the CallableStatement (interface) using the prepareCall() method of the Connection interface. This method **accepts a string variable representing a query to call the stored procedure and returns a CallableStatement object.**

Native SQL is **the SQL that the data source uses, such as Oracle SQL**

Question #1

Which of the following is the right sequence of stages in the JSP life cycle?



Choose the best option

- Initialization, Cleanup, Compilation, Execution
- Initialization, Compilation, Cleanup, Execution
- Compilation, Initialization, Execution, Cleanup
- Cleanup, Compilation, Initialization, Execution

Ans C

Following steps are involved in the JSP life cycle:

- Translation of JSP page to Servlet
- Compilation of JSP page(Compilation of JSP into test.java)
- Classloading (test.java to test.class)
- Instantiation(Object of the generated Servlet is created)
- Initialization(jspInit() method is invoked by the container)
- Request processing(_jspService()is invoked by the container)
- JSP Cleanup (jspDestroy() method is invoked by the container)

Question #2

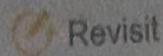
In Servlet3.0 which of the given annotation is used to declare the following class as a Servlet Component with the URL pattern will be "/hello"?

```
//annotation to be applied  
public class MyServlet extends javax.servlet.http.HttpServlet{  
}
```

- @WebServlet
- @Servlet("/hello")
- @Servlet
- @WebServlet("/hello")

Ans D

<https://www.codejava.net/java-ee/servlet/webservlet-annotation-examples>



Question # 33

Choose the inheritance model, which is not available in Hibernate.

Choose the best option

- Table Per sub-class
- Table Per class hierarchy
- Table Per Object
- Tables Per Concrete Class

Ans : C

Hibernate supports the three basic inheritance mapping strategies:

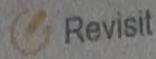
- table per class hierarchy
- table per subclass
- table per concrete class

In addition, Hibernate supports a fourth, slightly different kind of polymorphism:

- implicit polymorphism

Question # 36

What dependency artifact Id must be added to see the secure actuators in spring boot?



Revisit

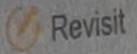
Choose the best option

- spring-boot-secure-actuators
- spring-boot-start-web-services
- spring-boot-dev-tools
- spring-boot-starter-security

11 12 13 14 15 16 17 18 19 20

Question # 19

In which one of the following situations does Hibernate Criteria API not provide a benefit?

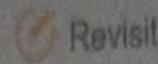


Choose the best option

- Allows to use aggregate functions
- Cannot order the result set
- Allows to fetch only selected columns of result
- Can add conditions while fetching results

Ans B

`addOrder()` can be used for ordering the results.



Question # 3

Which of the following statements is false about Hibernate SessionFactory?

- It is a class
- It is a factory of session objects
- It is a thread safe object
- It represents second level cache

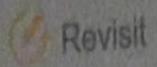
Ans A

SessionFactory is an Interface which is present in org.hibernate package and it is used to create Session Object.
It is immutable and thread-safe in nature.

SessionFactory holds the second level cache data. It is global for all the session objects and not enabled by default.
`buildSessionFactory()` method gathers the meta-data which is in the cfg Object.

From cfg object it takes the JDBC information and create a JDBC Connection.

`SessionFactory factory=cfg.buildSessionFactory();`



Choose the best option

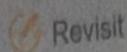
Question #5

Any client request to access resources in the WEB-INF/ directory must be returned with _____.

- BAD_REQUEST
- SC_NOT_FOUND
- SC_INTERNAL_SERVER_ERROR
- ESC_BAD_REQUEST

Ans B : SC_NOT_FOUND (404)

WEB-INF. This directory, which is contained within the Document Root, is invisible from the web container. It **contains all resources needed to run the application, from Java classes, to JAR files and libraries, to other supporting files that the developer does not want a web user to access.**



Question # 29

Which of the following is not a disadvantage of Hibernate?

Choose the best option

- Hibernate may be slower than JDBC , if caching is not used properly
- Hibernates connection pool is not great
- Need to learn HQL syntax
- Hibernate provides automatic support for transactions

Ans C

Hibernate has its own query language, i.e hibernate query language which is database independent

So if we change the database, then also our application will works as HQL is database independent

HQL contains **database independent** commands



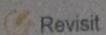
Choose the best option

Question # 10

What are the correct declaration of getConnection() method in DriverManager class?

- getConnection(String url, String info) throws SQLException
- getConnection(String urls[]) throws SQLException
- getConnection(String url, String user, String password) throws S
- getConnection(String url) throws SQLException

Ans D**public static** Connection getConnection(String url) **throws** SQLException



Question # 25

Complete the following aspect implementation for an around advice (missing lines --Line 4 and Line 7)

Identify the correct Line of code to be inserted at the respective lines.

```
@Aspect
public class BusinessAspect
{
    _____ // Line 4
    public void businessMethods() {} // Line 5
    _____ // Line 7
    public Object profile(ProceedingJoinPoint joinpoint) throws Throwable // Line8
    {
        long start = System.currentTimeMillis();
        Object output = joinpoint.proceed();
        long elapsedTime = System.currentTimeMillis() - start;
        System.out.println("Method execution time: " + elapsedTime + " milliseconds.");
        return output;
    }
}
```

Choose the best option

- @Pointcut("expression(* com.demo.dao.*.(..))")
 @Around("businessMethods()") //Line 4
 //Line 7
- @Around("businessMethods()")
 @Pointcut("expression(* com.demo.dao.*.(..))") //Line 4
 //Line 7
- @Around("businessMethods()")
 @Pointcut("execution(* com.demo.dao.*.(..))") //Line 4
 //Line 7
- @Pointcut("execution(* com.demo.dao.*.(..))")
 @Around("businessMethods()") //Line 4
 //Line 7

Question # 28

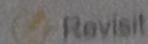
What is correct about JSP Scriptlets?



Choose the best option

- A loop must start in one Scriptlet and end in it
- Instructions in a Scriptlet must follow Java syntax
- Semicolon is not required at the end of each statement in a Scriptlet
- All of the above

**Ans D**



Choose the best option

- DispatcherServlet
- All Classes annotated with @Controller
- ViewResolver
- HandlerMapping

Question # 13

in spring MVC _____ class works as frontend controller.

Ans A

In Spring Web MVC, the DispatcherServlet class works as the front controller. It is responsible to manage the flow of the Spring MVC application.

Question # 12

```
<hibernate-configuration>
<session-factory>
    <property name="hibernate.hbm2ddl.auto">create</property>
</session-factory>
</hibernate-configuration>
```

Referring to the above partial code of hibernate configuration file,
which of the following is not a valid value for hibernate.hbm2ddl.auto property for hibernate
configuration?

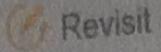


- create-drop
- drop
- update
- create

Ans B

```
<hibernate-configuration>
    <session-factory>
        <property name="hbm2ddl.auto">validate/create/update/create-drop</property>
        Or
        <property name="hbm2ddl.auto" value="validate/create/update/create-drop" />
    </session-factory>
</hibernate-configuration>
```

Section 2 of 2



Question # 38

Which of the following annotation can be used for testing spring boot application, which creates the entire context without starting the server?

Choose the best option

- @Test
- @WebMvcTest
- @SpringBootTest
- @SpringBootIntegrationTest

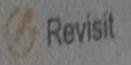
Ans D

Spring Boot provides the **@SpringBootTest** annotation which we can use to create an application context containing all the objects

<https://docs.spring.io/spring-boot/docs/2.1.5.RELEASE/reference/html/boot-features-testing.html>

Question # 21

Assume we do not explicitly set a value for auto-commit for a Connection instance. We have a Statement created from that Connection which we use to perform an insert operation using executeUpdate. Assuming there is nothing wrong with the inserts, what is the outcome?



Choose the best option

- An error is thrown as executeUpdate is not meant for inserts
- The rows are inserted, but not committed
- The rows are inserted and committed
- An error is thrown since we need to explicitly set a value for auto-c

Ans B