**VIVA QUESTIONS for J2EE**

**1.What are the components of J2EE applications?**

Client-tier components. Run on the client machine.

Web tier components. Run on the J2EE server.

Business tier components. Run on the J2EE server.

Enterprise information system software (EIS software).Runs on the EIS server.

**2. What is a J2EE container?**

The interface between a component and the low-level platform with specific functionality that support the component is called a container. Application server maintains control and provides relevant services through an interface or framework calls as a container.

**3. What are defined as web components?**

Java Servlets and Java server pages technology components are identified as web components. Servlets dynamically receive requests and make responses. JSP server pages also behave as Java Servlets but facilitate to create more static contents.

**4. Describe the MVC on struts?**

MVC stands for Model View Controller. Each section in Model View Controller can describe as follows.

Model –Model represents the internal state of the system as a set of single or many Java Beans.

View – Most often view is a constructed using Java Server Pages (JSP) technology.

Controller –The controller is the process that focuses on client request receiving and produce next level of a user interface according to the request.

The primary component of the controller in the framework is “ActionServlet” servlet class.

**5.Describe the file types \*.ear, \* .jar and \*.war?**

\*.jar files – Property file contains libraries, resources and accessories are included with the \*.jar file extension.

\*.war files – The files that need to development of web application (HTML, java scripts, JSP) included with a \*.war file extension.

\*.ear files – The files for Enterprise Java Beans modules for the application is save as \*.ear files.

**6. Describe servlet?**

Server side component that provides a powerful mechanism to create server side programs is called a servlet. There are servlets available with a design for various protocols. Servlet is also server and platform independent. na servlet is a pure java object.

**7. Servlet Packages**

The javax.servlet and javax.servlet.http packages provide interface and classes for create the servlet.All the servlet must implement the Servlet interfaces, which defines lifecycle methods.

Types of Servlet

GenericSerlvet – you can use when implementing a generic service

HttpServlet – you can use to handle HTTP-specific services.

**8. Lifecycle of servlet**

Servlet class is loaded.

Servlet instance is created.

init method is invoked.

service method is invoked.

destroy method is invoked.

**9. What are the difference types of JSP tags?**

There are 4 different types of tags associated with JSP.They are mentioned below

Directives

Declarations

Scriplets

Expressions

**10. What is EJB?**

EJB stands for Enterprise Java Beans. It is the server side components that executes in EJB container and encapsulates the business logic for the enterprise application.

**11. What are the Basic and subtypes of Enterprise Java Beans (EJB)?**

* Session Bean
  + stateless bean
  + statefull bean
* Message Driven bean
  + queue (point to point)
  + topic (publisher and subscriber)
* Entity Bean

**12. What is called JSP directive?**

JSP directive is the mechanism to provide Metadata information to web container about JSP file. In the translation and compilation phases of the JSP life cycle, these Metadata use by the web container.

**13. What are the different types of JSP directive?**

Page directive

Include directive

Taglib directive

**14. What are the two types of comments supported by JSP?**

There are two types of comments are supported by JSP.

HTML comment.

<!--HTML comment-->

JSP comment.

<% --JSP comment--%>

**15. Steps for database connection**

-->import JDBC packages.

-->Load and register the JDBC driver.

-->Open a connection to the database.

-->Create a statement object to perform a query.

-->Execute the statement object and return a query resultset

-->Process the resultset.

-->Close the resultset, connection and statement objects.

**16. packages for database**

import java.sql.\*;

**17. Define annotations**

Java Annotation is a tag that represents the metadata i.e. attached with class, interface, methods or fields to indicate some additional information which can be used by java compiler and JVM.

EX: @Override

@SuppressWarnings

@Deprecated

**18. JSP action tags**

|  |  |
| --- | --- |
| JSP Action Tags | Description |
| 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. |

19**. prepared statement, statement, callable statement**

The Statement is used for executing a static SQL statement.

The PreparedStatement is used for executing a precompiled SQL statement.

The CallableStatement is an interface which is used to execute SQL stored procedures, cursors, and Functions.

20. **execute, executequery and execute**

