

7/11/23

## ADVANCE JAVA PROGRAMMING (P.T. 3H)

December 2021 Question paper

### PART-A

1) Define the term Servlet?

\* A Servlet is a Java programming language class that is used to extend the capabilities of Servers that host applications accessed by means of a request-response programming model.

\* Servlets can respond to any type of request they are currently used to extend the applications hosted by Web Servers.

7) Write the Meaning of Interception?

\* Interception is the process of capturing the properties, methods, and events that a JavaBean Component Supports.

\* This process is used at run-time, as well as by Visual development tool at design time.

8) What is RMI Architecture?

\* RMI stands for Remote Method Invocation.

\* RMI is used to build distributed applications.

\* It provides Remote Communication between Java programs.

\* It is provided in the package java.rmi.

9) List Out the Components of RMI

- \* Transport layer
- \* Stub
- \* Skeleton
- \* RPL (Remote Reference Layer)

2) Give the Meaning of JSP and BDK

\* JSP is the standard development kit to work in Java. (Java Server Development Kit)

\* BDK is a product of Sun that reside on top of JSP. Other products to develop Java Beans. (BDK  $\Rightarrow$  Bean Development Kit)

3) How do HTML to be linked with Servlet?

\* Method = "post": To send the form data as an HTTP post request to the Server.

(Hyper Text Transfer Protocol)

\* Generally form Submission should be done in HTTP Post method.

\* Action = "URL of the Servlet": Specifies the relative URL of the Servlet which is responsible for handling data posted from this form (Uniform Resource Locator).

4) What is the default Scope of Variables in JSP?

\* The default Scope of Variables in JSP is the Page Scope.

\* Variables that do not have to be declared.

## (ENTERPRISE JAVA BEAN)

10) What is Callout in EJB?

\* Callout is a mechanism by which the life cycle of an Enterprise Bean can be intercepted.

\* EJB 3.0 Specification has specified Callouts for which Callout handler methods are created.

11) State the advantages of Servlets over Other Server Side Technologies.

\* Servlet  $\Rightarrow$  It is a technology is used to create a web application (resides at Server side and generates a dynamic web page).

\* Portability: Because it uses Java language.

\* Secure: Because it uses Java language.

12) What is Session Facade?

\* A Session Facade is an EJB design pattern in which Session Bean is used as a wrapper over Entity Beans.

\* A Client does not have a direct access to Entity Beans but through Session Beans only reducing network.

The strange Scalar Variable called \$- in JSP which is the default Variable.

5) Write any two Advantages of Java Beans?

\* Exposure to Other Applications.

\* Portable.

Exposure to Other Applications

$\rightarrow$  One of the most important advantages of Java Beans is the events, properties and the methods can be exposed directly to another application.

### Portable

$\rightarrow$  As Java Beans are built in Java, we can easily port them to any other platform that contains JRE (Java Runtime Environment).

6) What is Jar file?

\* Jar stands for Java Archive.

\* It is a file format based on the popular Zip file format and is used for aggregating many files into one.

\* Jar can be used as a general archiving tool.