

Date: July 24, 2011

**J2EE – Enterprise Java (60 Minutes)**

1. The HttpServlet class
  1. Extends Servlet class
  2. Extends GenericServlet class
  3. Implements JavaServlet interface
  4. Implements GenericServlet interface
2. When a remote object is referenced in rmi, the client gets
  1. A local copy of that object
  2. A reference to remote object by means of stub
  3. A skeleton
  4. All of above
3. What interface must all interfaces for remote services extend?
  1. java.rmi.RemoteService
  2. java.rmi.Remotable
  3. java.rmi.server.Remote
  4. java.rmi.Remote
4. When defining a remote interface, what exception is typically thrown as part of each method signature?
  1. IOException
  2. RemoteException
  3. RemoteCollisionException
  4. RemoteControlException
5. The client communicates with EJB-bean using
  1. EJBObject
  2. EJBHome
  3. EJB-Bean-Object
  4. EJB-Bean-Implementation Object
6. Why might you define a method as native?
  1. To get to access hardware that Java does not know about
  2. To define a new data type such as an unsigned integer
  3. To write optimized code for performance in a language such as C/C++
  4. To overcome the limitation of the private scope of a method
7. Which of the following statement is true?
  1. HttpServletResponse provides a method to send a temporary redirect response to the client.
  2. HttpSession provides a method to unbind all the objects bounded to it, without ending the session.
  3. ServletContext provides a method to return a RequestDispatcher object for a resource located in a particular path.
  4. None of the above
8. Name the class that includes the getSession method that is used to get the HttpSession object.
  1. HttpServletRequest
  2. HttpServletResponse
  3. SessionContext
  4. SessionConfig
9. Which of these is true.
  1. The default value of isThreadSafe attribute of page directive is true.
  2. If isThreadSafe attribute of page directive is set to true, then JSP container dispatches request for the page sequentially.
3. Setting isThreadSafe attribute to true for JSP pages, can lead to poor performance.
4. None of the above
10. Which of these is true about deployment descriptors. Select the one correct answer.
  1. The order of elements in deployment descriptor is important. The elements must follow a specific order.
  2. The elements of deployment descriptor are case insensitive.
  3. The servlet-mapping element, if defined, must be included within the servlet element.
  4. The web-app element must include the servlet element.
11. Which of the following combination is a part of J2EE technology?
  1. JSP, JFC, Servlets
  2. JNDI, JMS, JTA
  3. CORBA, JDBC, Swings
  4. JMX, JAXR, JFC
12. Type 4 database driver, also known as thin driver
  1. True
  2. False
13. Which of the following is not a JSP scripting element
  1. Declarations
  2. Scriptlets
  3. Expressions
  4. HTML Tags
14. Use of constructor in Servlets instead of init() method will
  1. Leave no effect.
  2. Can be done, but in older versions it will not pass any argument.
  3. Can not be done.
  4. ServletConfig will be available in both the cases.
15. Is it possible to stop the execution of a method before completion in a Session Bean because
  1. It is not allowed to access threads inside an EJB without writing code inside the Session Bean.
  2. It is allowed as we can kill threads any time.
  3. Session bean maintains the session so we cannot terminate its execution before the session gets terminated.
  4. We can use exit() method to achieve this.
16. The EJB container implements the EJBHome and EJBObject classes. For every request from a unique client
  1. container create a separate instance of the generated EJBHome and EJBObject classes
  2. container uses same generated EJBHome and separate EJBObject classes
  3. container create a separate instance of the EJBHome and uses same EJBObject classes
  4. container uses same instance of the EJBHome and uses same EJBObject classes
17. Which one of the following is the correct sequence of opening a result set.
  1. Create Statement, create connection, open result set.

2. Create Connection, create statement, open result set
3. Load driver, open connection, create statement, open result set.
4. All of the above.
18. Which of the following JSP comment will not go to the browser?
1. `<!-- some comment -->`
  2. `<!-- 2 + 2 = <%= 2 + 2 %> -->`
  3. `<%-- some comment --%>`
  4. None of the above
19. Which interface defines the following method in the servlet API?
- ```
public void service (ServletRequest request,
    ServletResponse response)
```
1. `javax.servlet.Servlet`
  2. `javax.servlet.GenericServlet`
  3. `javax.servlet.HttpServlet`
  4. `javax.servlet.http.HttpSession`
20. Read the following code segment
- ```
<form
    action="/scwcd/servlet/com.baboon.scwcd.servl
    etmodel.AnimalServlet" method="POST">
    <select name="animals" size="3" multiple>
        <option value="TIGER">Tiger</option>
        <option value="ELEPHANT"> Elephant
    </option>
        <option value="LION">Lion</option>
    </select>
    <input type="submit" value="Search">
</form>
```
1. `public class AnimalServlet extends HttpServlet {`
  2. `protected void doPost(HttpServletRequest req, HttpServletResponse resp)`
  3. `throws ServletException, IOException {`
  4. `// insert code here`
  5. `}`
  6. `}`
- What statement do you need to insert at line 4 of the AnimalServlet to pick up all selected animals in the form?
1. `String animals= req.getParameter("animals");`
  2. `String[] animals = req.getParameterValues("animals");`
  3. `String[] animals = req.getParameterNames("animals");`
  4. None of the above
21. Which statements about stateful and stateless session beans is true?
1. Only stateful session beans support transactions.
  2. Only stateful session beans can be passivated.
  3. Only stateful session beans have a 'setSessionContext' method.
  4. Both stateful and stateless session beans can support overloaded 'ejbCreate' methods.
22. Which three are true about transactions in EJB?
1. EJB 2.0 supports nested transactions.
  2. EJB 2.0 allows you to specify isolation levels.
  3. Message-driven beans must not use bean-managed transaction demarcation.
  4. Entity beans must not use bean-managed transaction demarcation.
23. Which will survive an EJB server crash?
1. Stateful session bean instances
  2. Stateless session bean instances
  3. Message-driven bean instances
  4. An entity bean's primary key
24. Which is directly invoked by the client?
1. `ejbPassivate`
  2. Business methods
  3. `setSessionContext`
  4. `newInstance`
25. Java-Beans are components that can run as standalone application.
1. True
  2. False
26. `java.sql.Connection` is an abstract class
1. True
  2. False
27. Which of the following is not true?
1. The `Serializable` interface is used to identify objects that may be written to an output stream.
  2. The `Externalizable` interface is implemented by classes that control the way in which their objects are serialized.
  3. The `Serializable` interface extends the `Externalizable` interface.
  4. The `Externalizable` interface extends the `Serializable` interface.
28. Consider the following piece of code:
- ```
String query = "SELECT COF_NAME, PRICE
FROM COFFEES";
ResultSet rs =
stmt.executeQuery(query);
String s = rs.getString("COF_NAME");
```
1. It will result in compile time error.
  2. There is nothing wrong in the code and will work perfectly alright
  3. It will result in run-time error
  4. None of the above
29. `DriverManager.getConnection(...)` API throws following exception :
1. `ClassNotFoundException`
  2. `SQLException`
  3. `SqlConnectionException`
  4. None of the above
30. Which Type driver can you use in a three-tier architecture and if the Web server and the DBMS are running on the same machine?
1. Type 1
  2. Type 2
  3. Type 3
  4. All of the above
31. A class that receives a notification if an attribute is added, removed or replaced from a session will implement which interface?
1. `HttpSessionBindingListener`
  2. `HttpSessionListener`
  3. `HttpSessionActivationListener`
  4. `HttpSessionAttributeListener`
32. Which of the following are correct JSP useBean declarations?
1. `<jsp:useBean id="softDrink"
 beanName="Drink.ser"
 class="com.baboon.interface.Drink" />`
  2. `<jsp:useBean beanName="instructor"
 class="com.baboon.users.Instructor" />`

3. `<jsp:useBean id="card" class="com.baboon.cardgame.Card" />`
4. None of the above
33. Which of the following actions will cause a session to be expunged in a web application?
1. Navigating to a different web site or web application
  2. Closing the web browser.
  3. The client does not send a request to the web application for a length of time that exceeds the session timeout value of the associated session object in the application.
  4. All of the above.
34. If a JSP page overrides the `jspInit()` method using a declaration JSP tag, which phase of the JSP page life-cycle generates the overridden method in the servlet?
1. page translation
  2. JSP page compilation
  3. call `jspInit()`
  4. call `_jspService()`
35. Which of the following statements regarding the `sendError` response method are true?
1. `sendError` accepts `java.lang.Throwable` as an argument.
  2. `sendError` has the side effect of committing the response.
  3. `sendError` is only used to set the return status code when there is no error
  4. `sendError` throws an `java.lang.InvalidStateException` if the response has already been committed.
36. How is a servlet declared to use the single thread model?
1. The servlet declares the service method as synchronized.
  2. In the deployment descriptor.
  3. Nothing is required, by default a servlet uses the single thread model.
  4. The servlet implements the interface `SingleThreadModel`
37. Which of the following attributes are mandatory within the `<jsp:setProperty>` tag?
1. Name
  2. Value
  3. Id
  4. Property
38. You have created a Listener called `AccountApplicationListener` that receives events when the context of the web-application "account" is created or destroyed. How would you define this in your deployment descriptor?
1. `<listener>`  
`com.cdac.acts.AccountApplicationListener`  
`</listener>`
  2. `<listener><listener-class>com.cdac.acts.AccountApplicationListener</listener-class></listener>`
  3. `<listener-class>com.cdac.acts.AccountApplicationListener</listener-class>`
  4. `<web-app name="account">`  
`<listener-class>com.cdac.acts.AccountApplicationListener</listener-class>`  
`</web-app>`
39. Which of the following child elements of the root element is not valid in the deployment descriptor?
1. `<servlet-mapping>`
  2. `<mime-mapping>`
  3. `<icon>`
  4. `<context-mapping>`
40. Which interface of the Servlet API's defines methods to extract form parameters from the HTTP request?
1. `HttpServletRequest`
  2. `ServletRequest`
  3. `Servlet`
  4. `HttpServletResponse`
41. If you have a chat server using UDP, which class will you use on server side?
1. `ServerSocket`
  2. `Socket`
  3. `DatagramSocket`
  4. `DatagramServerSocket`
42. Which APIs is provided by the container?
1. JMX
  2. JSP
  3. JAXP
  4. JDO
43. Which of the following files is the correct name and location of deployment descriptor of a web application. Assume that the web application is rooted at `\doc-root`. Select the one correct answer
1. `\doc-root\dd.xml`
  2. `\doc-root\web.xml`
  3. `\doc-root\WEB-INF\web.xml`
  4. `\doc-root\WEB-INF\dd.xml`
44. Which of these is true about deployment descriptors. Select the one correct answer.
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  3. The `servlet-mapping` element, if defined, must be included within the `servlet` element.
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46. Which of the following statements regarding the action JSP tag is false?
1. Used to declare a `JavaBean` instance in a JSP page.
  2. Used to generate HTML code to embed an applet on a web page.
  3. User-defined actions can be created.
  4. Provides translation-time instructions to the JSP engine.

47. Which statement can be inserted in a Servlet to forward the request to `http://www.cdac.in`, outside the current domain?
1. `resp.encodeRedirectURL("http://www.cdac.in");`
  2. `resp.sendRedirect(resp.encodeRedirectURL("http://www.cdac.in "));`
  3. `resp.sendRedirect`  
`(HttpServletResponse.SC_MOVED_PERMANENTLY, " http://www.cdac.in ");`
  4. `getServletContext().getRequestDispatcher("http://www.cdac.in").forward(req,resp);`
48. Which three are true about transactions in EJB?
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  2. EJB 2.0 allows you to specify isolation levels.
  3. Message-driven beans must not use bean-managed transaction demarcation.
  4. Entity beans must not use bean-managed transaction demarcation.
49. What gets printed when the following JSP code is invoked in a browser. Select the one correct answer.
- ```
<%= if(Math.random() < 0.5) %>
hello
<%= } else { %>
hi
<%= } %>
```
1. The browser will print either hello or hi based upon the return value of random.
  2. The string hello will always get printed.
  3. The string hi will always get printed.
  4. The JSP file will not compile.
50. Which of the following represents a correct syntax for usebean.
1. `<jsp:usebean id="fruit scope ="page"/>`
  2. `<jsp:usebean id="fruit type ="String"/>`
  3. `<jsp:usebean id="fruit class="Fruit" beanName="Fruit"/>`
  4. None of the above