REVIEW QUESTIONS

1. Which of the following is a valid use of the `<jsp:useBean>` action? (Select one)

    a `<jsp:useBean id="address" class="chapter14.AddressBean" />`

    b `<jsp:useBean name="address" class="chapter14.AddressBean"/>`

    c `<jsp:useBean bean="address" class="chapter14.AddressBean" />`

    d `<jsp:useBean beanName="address" class="chapter14.AddressBean" />`

2. Which of the following is a valid way of getting a bean's property? (Select one)

    a `<jsp:useBean action="get" id="address" property="city" />`

    b `<jsp:getProperty id="address" property="city" />`

    c `<jsp:getProperty name="address" property="city" />`

    d `<jsp:getProperty bean="address" property="*" />`

3. Which of the following are valid uses of the `<jsp:useBean>` action? (Select two)

    a `<jsp:useBean id="address" class="chapter14.AddressBean"`
    `name="address" />`

    b `<jsp:useBean id="address" class="chapter14.AddressBean"`
    `type="AddressBean" />`

    c `<jsp:useBean id="address" beanName="AddressBean"`
    `class="chapter14.AddressBean" />`

    d `<jsp:useBean id="address" beanName="AddressBean"`
    `type="AddressBean" />`

4. Which of the following gets or sets the bean in the `ServletContext` container object? (Select one)

    a `<jsp:useBean id="address" class=" chapter14.AddressBean" />`

    b `<jsp:useBean id="address" class="chapter14.AddressBean"`
    `scope="application" />`

    c `<jsp:useBean id="address" class="chapter14.AddressBean"`
    `scope="servlet" />`

    d `<jsp:useBean id="address" class="chapter14.AddressBean"`
    `scope="session" />`

    e None of the above

5. Consider the following code:

    ```
    <html><body>
    <jsp:useBean id="address" class="chapter14.AddressBean"
    scope="session" />
    state = <jsp:getProperty name="address" property="state" />
    </body></html>
    ```

    Which of the following are equivalent to the third line above? (Select three)

```
a <% state = address.getState();                            %>
b <% out.write("state = "); out.print(address.getState()); %>
c <% out.write("state = "); out.print(address.getstate()); %>
d <% out.print("state = " + address.getState());            %>
e state = <%= address.getState()                            %>
f state = <%! address.getState();                           %>
```

6. Which of the options locate the bean equivalent to the following action? (Select three)

   ```
   <jsp:useBean id="address" class="chapter14.AddressBean"
   scope="request" />
   ```

   a `request.getAttribute("address");`
   b `request.getParameter("address");`
   c `getServletContext().getRequestAttribute("address");`
   d `pageContext.getAttribute("address",PageContext.REQUEST_SCOPE);`
   e `pageContext.getRequest().getAttribute("address");`
   f `pageContext.getRequestAttribute("address");`
   g `pageContext.getRequestParameter("address");`

7. Consider the following code for `address.jsp`:

   ```
   <html><body>
   <jsp:useBean id="address" class="chapter14.AddressBean" />
   <jsp:setProperty name="address" property="city" value="LosAngeles" />
   <jsp:setProperty name="address" property="city" />
   <jsp:getProperty name="address" property="city" />
   </body></html>
   ```

   What is the output if the above page is accessed via the URL

   ```
   http://localhost:8080/chap14/address.jsp?city=Chicago&city=Miami
   ```

   Assume that the `city` property is not an indexed property. (Select one)

   a `LosAngeles`
   b `Chicago`
   c `Miami`
   d `ChicagoMiami`
   e `LosAngelesChicagoMaimi`
   f It will not print anything because the value will be `null` or `""`.

8. Consider the following code:

   ```
   <html><body>

   <%{%>
   <jsp:useBean id="address" class="chapter14.AddressBean"
   scope="session" />
   ```

```
<%}%>

//1

</body></html>
```

Which of the following can be placed at line //1 above to print the value of the
street property? (Select two)

a `<jsp:getProperty name="address" property="street" />`

b `<% out.print(address.getStreet()); %>`

c `<%= address.getStreet() %>`

d `<%= ((AddressBean)session.getAttribute("address")).getStreet() %>`

e None of the above; the bean is nonexistent at this point.

9. Consider the following code:

```
<html><body>

<%{%>
<jsp:useBean id="address" class="chapter14.AddressBean"
scope="session" />
<%}%>

<jsp:useBean id="address" class="chapter14.AddressBean"
scope="session" />
<jsp:getProperty name="address" property="street" />

</body></html>
```

Which of the following is true about the above code? (Select one)

a It will give translation-time errors.

b It will give compile-time errors.

c It may throw runtime exceptions.

d It will print the value of the street property.

10. Consider the following servlet code:

```
//...

public void service (HttpServletRequest request,
                     HttpServletResponse response)
        throws IOException, ServletException
   {
   //1
   }
```

Which of the following can be used at //1 to retrieve a JavaBean named
address present in the application scope? (Select one)

a `getServletContext().getAttribute("address");`

b `application.getAttribute("address");`

c `request.getAttribute("address",APPLICATION_SCOPE);`

d `pageContext.getAttribute("address",APPLICATION_SCOPE);`

11. Consider the following code, contained in a file called `this.jsp`:

```
<html><body>
<jsp:useBean id="chapter14.address" class="AddressBean" />
<jsp:setProperty name="address" property="*"  />
<jsp:include page="that.jsp"   />
</body></html>
```

Which of the following is true about the `AddressBean` instance declared in this code? (Select one)

a The bean instance will not be available in `that.jsp`.

b The bean instance may or may not be available in `that.jsp`, depending on the threading model implemented by `that.jsp`.

c The bean instance will be available in `that.jsp`, and the `that.jsp` page can print the values of the beans properties using `<jsp:getProperty />`.

d The bean instance will be available in `that.jsp` and the `that.jsp` page can print the values of the bean's properties using `<jsp:getProperty />` only if `that.jsp` also contains a `<jsp:useBean/>` declaration identical to the one in `this.jsp` and before using `<jsp:getProperty/>`.

12. Consider the following code contained in a file named `this.jsp` (the same as above, except the fourth line):

```
<html><body>
<jsp:useBean id="address" class="chapter14.AddressBean" />
<jsp:setProperty name="address" property="*"  />
<%@ include file="that.jsp"   %>
</body></html>
```

Which of the following is true about the `AddressBean` instance declared in the above code? (Select one)

a The bean instance will not be available in `that.jsp`.

b The bean instance may or may not be available in `that.jsp`, depending on the threading model implemented by `that.jsp`.

c The bean instance will be available in `that.jsp`, and the `that.jsp` page can print the values of the bean's properties using `<jsp:getProperty />`.

d The bean instance will be available in `that.jsp`, and the `that.jsp` page can print the values of the bean's properties using `<jsp:getProperty />` only if `that.jsp` also contains a `<jsp:useBean/>` declaration identical to the one in `this.jsp` and before using `<jsp:getProperty/>`.