- 1. Which of the following interfaces or classes is used to retrieve the session associated with a user? (Select one)
 - a GenericServlet
 - ${f b}$ ServletConfig
 - c ServletContext
 - d HttpServlet
 - e HttpServletRequest
 - f HttpServletResponse
 - 2. Which of the following code snippets, when inserted in the doGet () method, will correctly count the number of GET requests made by a user? (Select one)

```
a HttpSession session = request.getSession();
  int count = session.getAttribute("count");
  session.setAttribute("count", count++);
b HttpSession session = request.getSession();
  int count = (int) session.getAttribute("count");
  session.setAttribute("count", count++);
c HttpSession session = request.getSession();
  int count = ((Integer) session.getAttribute("count")).intValue();
  session.setAttribute("count", count++);
d HttpSession session = request.getSession();
  int count = ((Integer) session.getAttribute("count")).intValue();
  session.setAttribute("count", new Integer(++count));
```

- 3. Which of the following methods will be invoked on a session attribute that implements HttpSessionBindingListener when the session is invalidated? (Select one)
 - a sessionDestroyed
 - **b** valueUnbound
 - c attributeRemoved
 - d sessionInvalidated

- 4. Which of the following methods will be invoked on a session attribute that implements appropriate interfaces when the session is invalidated? (Select one)
 - a sessionDestroyed Of HttpSessionListener
 - **b** attributeRemoved Of HttpSessionAttributeListener
 - c valueUnbound Of HttpSessionBindingListener
 - **d** sessionWillPassivate Of HttpSessionActivationListener
- 5. Which of the following methods will expunge a session object? (Select one)

```
a session.invalidate();
b session.expunge();
c session.destroy();
d session.end();
e session.close();
```

6. Which of the following method calls will ensure that a session will never be expunged by the servlet container? (Select one)

```
a session.setTimeout(0);
b session.setTimeout(-1);
c session.setTimeout(Integer.MAX_VALUE);
d session.setTimeout(Integer.MIN_VALUE);
e None of these
```

- 7. How can you make sure that none of the sessions associated with a web application will ever be expunged by the servlet container? (Select one)
 - a session.setMaxInactiveInterval(-1);
 - **b** Set the session timeout in the deployment descriptor to -1.
 - c Set the session timeout in the deployment descriptor to o or -1.
 - **d** Set the session timeout in the deployment descriptor to 65535.
 - You have to change the timeout value of all the sessions explicitly as soon as they are created.
- 8. In which of the following situations will a session be invalidated? (Select two)
 - a No request is received from the client for longer than the session timeout period.
 - **b** The client sends a KILL SESSION request.
 - c The servlet container decides to invalidate a session due to overload.
 - **d** The servlet explicitly invalidates the session.
 - e A user closes the active browser window.
 - f A user closes all of the browser windows.

- 9. Which method is required for using the URL rewriting mechanism of implementing session support? (Select one)
 - a HttpServletRequest.encodeURL()
 - **b** HttpServletRequest.rewriteURL()
 - C HttpServletResponse.encodeURL()
 - d HttpServletResponse.rewriteURL()
- 10. The users of your web application do not accept cookies. Which of the following statements are correct? (Select one)
 - a You cannot maintain client state.
 - **b** URLs displayed by static HTML pages may not work properly.
 - c You cannot use URL rewriting.
 - d You cannot set session timeout explicitly.