**1. Can post requests be bookmarked? What are the problems?**

A HTTP post can be bookmarked, but since a bookmark only consists of the URL, all of the parameters will be lost.

**2. What is the purpose of request dispatching?**

The request dispatching has the purpose to forward the request processing to another local resource.

**3. What is the difference between redirect and request dispatch?**

The request dispatching forward the request to another local resource, servlet or JSP, for example, and the redirect will redirect to another URL, and it may be to another site or the same site.

**4. What is an attribute ?**

Is an object bound into one of the three servlet API objects and it has a name value pair and can be used to store values in a server-side purpose.

**5. What is the difference between attributes and parameters?**

Parameters are those that are passed from the client to the server and they are represented by string type and attributes are for server-side usage and can be used not for just, string, but objects as well. Another difference is that parameters are readonly and attributes are read/write objects.

**6. What are dangers of using attributes?**

Context scope attributes has application level state, then they are global and shared by every servlet and every request in the application, because of that they are not thread safe.

**7. What does it mean to say that http is stateless? Give an example of a stateful protocol.**

A stateless protocol is a protocol in which each communication is handled as an independent unrelated to other similar communications. A TCP connection-oriented session is a stateful protocol because both systems during the connection maintain information about the session itself during its life.

**8. Give 5 different methods for maintaining state information (count each attribute scope as one method).**

1. request scope: destroyed when servlet finishes processing request

2. session scope: destroyed when user closes browser

3. application scope destroyed when the container stopped.

4. Cookies saved on browser, either temporary (deleted when the browser closes) or permanent

5. Hidden fields on a form

**9. How long does a session last?**

By default, a session lasts 30 minutes but you can adjust this limit.

**10. What is a cookie, and how long does a cookie last?**

HTTP cookies are usually small text files, given ID tags that are stored on your computer’s browser directory. They are created to maintain the state about some user information.

**11. What is the purpose of URL rewriting?**

It is the process of altering the parameters in a URL. Changing the URL can help with users access and also helps the site visibility. And can be used by hackers to redirect users without their knowledge.

**12. Why does the request attribute report ‘null’ for the maintaining state demo?**

Because the request scope it is destroyed when a servlet finishes processing request. So in the next request the value doesn’t exists anymore.