Course:	Web Programming	Course Code:	CS-406
Program:	BS(Computer Science)	Semester:	Fall 2017
Duration:	60 Minutes	Total Marks:	50
Paper Date:	04-Nov-17	Weight	15%
Section:	ALL	Page(s):	5
Exam:	Mid 2	Roll No:	

Instruction/Notes: **Note: Please use the answer sheet to answer the questions.**

Question1- If a servlet is invoked using the **forward** or **include** method of **RequestDispatcher**, which methods of the servlet's request object can access the request attributes set by the container? (Choose all that apply)

A- getCookies()

B-getAttribute()

C-getRequestPath()

D-getRequestAttribute()

E-getRequestDispatcher()

Marks 2

Question2- Which type of objects can store attributes? (Choose all that apply)

A-ServletConfig

B-ServletResponse

C-RequestDispatcher

D-HttpServletRequest

E-HttpSessionContext

Marks 2

Question 3- Which statements about HttpSession objects are true? (Choose all that apply)

A- A session whose timeout period has been set to -1 will never expire

B- A session will become invalid as soon as the user closes all browser windows

C-A session will become invalid after a timeout period defined by the servlet container.

Marks 2

Question 4- Given that req is an HttpServletRequest, which snippets create a session if one does not exist?

A- req.getSession()

B-req.getSession(true);

C-req.getSession(false);

D-req.createSession();

E-req.getNewSession();

F- req.createSession(true);

G- req.createSession(false);

Marks 2

Question 5- Which are valid JSP implicit variables? (Choose all that apply)

A-stream

B-context

C-exception

D-listener

E-application

Marks 2

Question 6-Which show valid usage of EL implicit variables? (Choose all that apply)

A-${cookies.foo}

B-${initParam.foo}

C-${pageContext.foo}

D-${requestScope.foo}

E-${header["User-Agent"]}

F-${requestDispatcher.foo}

G-${pageContext.request.requestURI}

Question 7-

```
public class MyBean{

        private java.util.Map params;

        private java.util.List objects;

        private String name;

        public java.util.Map getParams() {return params;}

        public String getName(){ return name;}

        public java.util.List getObjects() {reutrn objects;}

}
```

Given the code above, which will cause errors (assume that an attribute mybean can be found, and is of type MyBean)? (Choose all that apply)

A-${mybean.name}

B-${mybean["name"]}

C-${mybean.objects.a}

D-${mybean["objects"].a}

Question 8- Which are required fields in the login form when using Form Based Authentication> (Choose all that apply)

A-pw

B-id

C-j_pw

D-j_password

E-password

Question 9 Which security mechanism always operates independantly of the transport layer? (Choose all that apply)

A-authorization

B-data integrity

C-authentication

D- confidentiality

Marks 2

Question 10- Given a deployment descriptor with three valid <security-constraint> elements, all constraining web resource Am whose respective <auth-constraint> sub elements are:

<auth-constraint>

        <role-name>Omar</role-name>

</auth-constraint>

<auth-constraint>

                <role-name>Ali</role-name>

</auth-constraint>

Who can access resource A?

A-no one

B-anyone

C-only Omar

D-only Ali

E-only Omar and Ali

F-anyone but Omar and Ali

Marks 2

Question 11- Briefly describe three ways you can parse and XML document.

Marks 10

Question 12- What are cookies what are they used for. Please give example of a custom cookie.

Marks 10

Question 13- In a JSP page, you can write Java code within a script. What options do you have to replace the java script code? Briefly explain how those methods work.

Marks 10