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| **National University of Computer and Emerging Sciences, Lahore Campus** | | | | |
| C:\Users\saif\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\final design.jpg | **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):** |  |
| **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?

A- getCookies()

B-getAttribute() (Correct)

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 (Correct)

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 (Correct)

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. (Correct)

Marks 2

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

A- req.getSession() (correct)

B-req.getSession(true); (correct)

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 (correct)

C-exception (correct)

D-listener

E-application (correct)

Marks 2

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

A-${cookies.foo}

B-${initParam.foo}(Correct)

C-${pageContext.foo}

D-${requestScope.foo}(Correct)

E-${header["User-Agent"]}(Correct)

F-${requestDispatcher.foo}

G-${pageContext.request.requestURI}(Correct)

Marks 2

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} (Correct)

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

Marks 2

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 (Correct)

E-password

Marks 2

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

A-authorization (Correct)

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/>

<auth-constraint>

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

</auth-constraint>

Who can access resource A?

A-no one (Correct)

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