

Bachelor of Information Technology
3rd year, 2nd Semester Examination, 2017

Subject: Web Technologies - II

Time - Three Hours

Full Marks – 100

Answer question 1 and any 5 (five) questions from the rest.

1. Answer all the questions. 10x2=20
 - a) Write the name of two web servers.
 - b) What's the full form of JSP?
 - c) What are the advantages of Servlet over CGI?
 - d) What are the differences between GenericServlet and HttpServlet?
 - e) What are the disadvantages of cookies?
 - f) How do you make JSP page thread-safe?
 - g) What are the 3 tags used in JSP bean development?
 - h) What are, in a nutshell, the options for server-side programming?
 - i) What's the full form of CGI?
 - j) What is the difference between HTML5 local storage and cookies?

2. [4+6+6]
 - a) What is a web application and what is its directory structure?
 - b) What are the differences between *redirecting* and *forwarding* a request in the context of a web container?
 - c) What are different methods of session management in servlets? Demonstrate with any one method.

3. [4+6+6]
 - a) Are Servlets Thread Safe? If not, how to achieve thread safety in Servlets?
 - b) What are Servlet attributes and their scope?
 - c) What are the phases of servlet life cycle?

4. [4+6+6]
 - a) What is the different between a web server and an application server?
 - b) Write the primary components of a JSP page.
 - c) Demonstrate how to pass and retrieve parameters in JSP.

5. [4+6+6]
 - a) What is a war file? How to create a war file?
 - b) What do you mean by the concept of SSI(Server Side Includes)?
 - c) Write the advantages of CGI programming over other server-side programming techniques. Write the principles of CGI Programming.

6. [4+6+6]
- Write the names of four JSP implicit objects with their scope?
 - What are the differences between JSP include directive and include action?
 - What are the basic differences between the JSP custom tags and java beans?
7. [4+6+6]
- What are the primary JDBC API components? Write their functions briefly.
 - What is JDBC Transaction Management and how do you do it?
 - What are different types of ResultSet?
8. [4+6+6]
- Differentiate between *Canvas* and *SVG*?
 - What are the advantages of SVG over other image format like JPEG or GIF?
 - What is HTML5 application cache? Discuss how it works.
9. [4+6+6]
- Name some of the new features of HTML5.
 - What is HTML5 Web Storage? Explain *localStorage* and *sessionStorage*. How can we add and remove data from local storage?
 - What are *web workers* and why do we need them? How to create a web worker?