

COURSE CODE: 12B1WCI733

MAX. MARKS: 25

COURSE NAME: Advanced Java

COURSE CREDITS: 3

MAX. TIME: 1 Hour 30 Minutes

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

1. Explain the life cycle of a Servlet. What is the importance of deployment descriptor in the design of Servlets? (CO-3) [4 marks]
2. What do you mean by session tracking? Create a web-based application in which user enters his name through an HTML form. The username is passed as a parameter to the Servlet1. The Servlet1 after retrieving the parameter generates a cookie with the username being stored in the cookie value. In the response, Servlet1 generate a hyperlink, which is linked to the Servlet2. Along with the response object, the cookie is stored permanently on the client's hard disk. The same user then clicks on the hyperlink to invoke the Servlet2. The Servlet2 must have the provision for accessing and displaying the cookie name and its value. (CO-3) [5 marks]
3. Write a web application in which the user enters his username and password through an HTML form. The username and password are passed as parameters to the Servlet1 for authentication. Servlet1 verifies the user's details from the database USER (name, password). In the case of any mismatch in the username or the password, the Servlet1 displays an error message and prompts user to re-enter his details. Conversely, if the username and password are correct, then the Servlet1 forwards the request to the Servlet2 that display a message "Welcome username! You are registered successfully".
(CO-2, CO-3) [6 marks]
4. You are given a table called **EMPLOYEE** { **empid** varchar2, **ename** varchar2, **age** number(2), **salary** number (5,2) }. Write a JSP program to insert two records into the the table EMPLOYEE using the PreparedStatement interface. (CO-2) [5 marks]
5. Differentiate between the following terms (in 2-4 sentences):
 - a. PreparedStatement and Statement interfaces in JDBC
 - b. Servlet and CGI scripting
 - c. JSP and Servlet
 - d. Cookie and URL re-writing
 - e. ServletContext and ServletConfig (CO-2) [5×1= 5 marks]