Department of Computer Science & Engineering

Advanced Java Laboratory (CSL56)

I.A. Marks: 50	**Exam Hours: 03**
Credits: 0:0:1	**Exam Marks: 50**

Develop the following programs using Java language

SL. No.	QUESTIONS
1.	Write a java program that connects to the Employee (ID, FName. LName, Project, Salary) database using JDBC and perform the following operations. i. Display details of all the Employees. ii. Display details of all the employees who work for project "Web Development". iii. Display the IDs of all those employee who have salary above 75,000/- and are in "Web Development". iv. Display the total Number of employees who have salary less than 50,000/-.
2.	Write a java program that connects to a Department (Dept_ID, Name, Year_Established, Head_Name, No_of_Employees) database using JDBC and perform the following. i. Display details of all the Departments using Statement Object. ii. Display details of all the Departments which are established in the year 2000 using PreparedStatement object. Read the value from the user and display appropriate messages. iii. Display details of all the Departments by reading Dept_ID and Department Name from the user using PreparedStatement object. iv. Insert a new row using PreparedStatement object. Display the details.
3.	Write a java program that connects to the Movies (ID, Movie_Name, Genre, IMDB_Rating, Year) database using JDBC. Create an Updatable ResultSet and perform the following operations. i. Display details of all the Movies from the table. ii. Display details of 5th Movie from the table. iii. Insert a new row into the table using PreparedStatement and display all the details. iv. Delete a row from the table where the IMDB_Rating is less than 5. v. Update the Genre of a movie with ID as 10 to "Sci-fi".
4.	Write a java program that connects to a Bank_Account (Account_No, Account_Name, Type_of_Account, Balance) table using JDBC and perform the following.

	i. Insert rows using PreparedStatement. ii. Display details of all the Accounts. iii. Demonstrate the Working of Rollback and Commit. iv. Demonstrate the Working of SavePoints.
5.	Write a java servlet program to implement a webpage to check if the voter is eligible or not. User will enter his first name, last name, email id and date of birth. Check if he is eligible to vote or not. Validate the page before displaying the details. **Voting Page** First Name: Last Name: E-Mail ID: Date of Birth: mm/dd/yyyy Submit
6.	Write a java servlet program to calculate the CGPA. Read the USN, Name, SGPA of previous 4 semesters from user in an HTML page. Calculate the CGPA and display the details using a Servlet class.
7.	Write a java servlet program to implement a simple calculator. Validate the input data and display appropriate messages. **CALCULATOR PROGRAM** First Number : Second Number: ◯ Addition ◯ Subtraction ◯ Multiplication ◯ Division ◯ e^x Submit
8.	Write a java servlet program to create 4 cookies. Set 2 cookies with 1 minute of expiry date. Display all the cookies when the servlet is loaded for the first time. Refresh the page and display the remaining 2 cookies.

9.	Write a java servlet program that reads either area name or phone no. of police station of and displays details of the police station. Use a HTML file to read the input and display the output using a Servlet class. Create police_station table with appropriate fields like Station_ID, Area_Name, Phone_Number and Address.
10.	Write a java servlet program to insert Employee details like Emp_ID, Employee_Name, Address, Date_of_Birth in Employee table. Create a HTML page to read the appropriate inputs and insert the data in the table. Provide a button to display the details in table format in a new page.
11.	Write a JSP program to accept the 5 subject marks entered and display his/her grade to the browser. Department has set the grade for the subject Java as follows: Above 90=S, 80-89=A, 70-79=B, 60-69=C, 50-59=D, Below 50=FAIL.
12.	Write a JSP program that takes the user's name and age from a form. Echo back the name and age along with a message stating the price of movie tickets. The price is determined by the age passed to the JSP. • If the age is greater than 62, the movie ticket price is Rs. 50. • If the user is less than 10 years old, the price is Rs. 30. • For everyone else, the price is Rs. 80.
13.	Write a JSP program to connect to the Student database and display the details. The Student table has USN, Name & CGPA. Create an index.html page to collect USN from the User. Connect to database from displayData.jsp and display the USN & Name if the USN is present in the table. Else display Invalid USN.
14.	Write a JSP program to connect to the database and display the following details. The Employee table has ID, FName, LName, Project and Salary. • Create an index page to insert the data into the table. • Create a second JSP page to display the details using Employee ID.

Marks Distribution:

Conduction and Result	Write-Up	Execution	Viva/Demo	Change of Program	Total
	8	35	7	-10 Marks	50 Marks

HOD, Dept. of CSE