DSCE
Dept. of Information Science & Engg

JAVA AND J2EE LAB

Course code: 18IS6DLJVA   **Credits: 02**
L: P: T: S: 0: 2: 1: 0   **CIE Marks: 50**
Exam Hours: 03   **SEE Marks: 50**

Course Objectives:
1. To provide an introduction to java and object oriented concepts in java programming.
2. Understand the creation and use of packages and interfaces.
3. Analyze and use exception handling in java.
4. Create web applications using Servlets and JSP.

Course Outcomes: After completion of the course, the graduates will be able to

CO1	Write, compile and execute java programs.
CO2	Apply the basic concepts of object oriented programming in writing java programs.
CO3	Design and use classes, packages and interfaces
CO4	Analyze and implement exception handling, event handling
CO5	Develop graphical user interface using swings
CO6	Construct web applications using Servlets and JSP

Mapping of Course outcomes to Program outcomes:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	-	-	2	-	-	-	-	-	-	2	-	1	-
CO2	3	2	1	-	2	-	-	-	-	-	-	2	-	1	-
CO3	3	2	-	-	2	-	-	-	-	-	-	2	-	1	-
CO4	3	3	-	-	2	-	-	-	-	-	-	2	-	1	-
CO5	2	2	-	-	2	-	-	-	-	-	-	2	-	2	-
CO6	2	3	2	-	2	-	-	-	-	-	-	2	-	3	3

Experiment No.	Contents of the experiment	Hours	COs
1.	(a) Write a Java program to implement linear search. (b) Write a java program for sorting a given list of names.	3	CO1 CO2
2.	(a) Write a java program that illustrates the multilevel inheritance. (b) Write a java program that illustrates the multiple inheritances by using interfaces.	3	CO1 CO2

3.	(a) Write a Java program to implement the concept of importing classes from user defined package and creating packages. (b) Write a Java program that reads a line of integers and then displays each integer and the sum of all integers. (use StringTokenizer class)	3	CO1 CO3
4.	(a) Write a program to perform arithmetic operations using static members (b) Write a program to read and print n numbers using arrays	3	CO1 CO2
5.	(a) Write a Java program to display the use of String class and its methods. (b) Write a Java program to practice using String Buffer class and its methods.	3	CO1 CO2
6.	Write a java program that implements a multi-thread application that has three threads. First thread generates random integer every 1 second and if the value is even, second thread computes the square of the number and prints. If the value is odd, the third thread will print the value of cube of the number.	3	CO1 CO2 CO3
7.	Write a program to implement the concept of Exception Handling by creating user defined exceptions.	3	CO1 CO4
8.	Write a Java Program to demonstrate Mouse events.	3	CO1 CO2 CO4
9.	Write a Java program with Servlets to create a dynamic HTML form to accept and display user name and password with the help of 'get()' and 'post()' methods.	3	CO3 CO5
10.	Write a Java Servlet program to demonstrate session tracking.	3	CO3 CO5
11.	Write a JAVA JSP program to implement verification of a particular user login and display a welcome page.	3	CO2 CO3 CO5
12	Write simple JSP program to display a phrase with increasing font size.	3	CO2 CO3 CO5

TEXT BOOKS:

1. The Complete Reference - Java: Herbert Schildt, 7th Edition, McGraw Hill, 2017.
2. Jim Keogh: J2EE - The Complete Reference, Tata McGraw Hill, 2007.

REFERENCE BOOKS:

1. Y. Daniel Liang: Introduction to JAVA Programming, 10th Edition, Pearson Education, 2015.
2. Herbert Schildt: Java The Complete Reference, 7th Edition, Tata McGraw Hill, 2007.
3. Stephanie Bodoff et al: The J2EE Tutorial, 2nd Edition, Pearson Education, 2004.

Assessment Pattern:

CIE –Continuous Internal Evaluation Lab (50 Marks)

Continual Internal Evaluation Marks (25)	IA Test Marks (25)	Final Marks (50)

SEE–SemesterEndExaminationTheory(50Marks)