SCHEME OF COURSE WORK

Course Details:

Course Title	**: OBJECT ORIENTED PROGRAMMING LAB**		
Course Code	**: 15CT1113**	**L T P C**	**: 0 0 3 2**
Program:	**: B.Tech.**		
Specialization:	**: Information Technology**		
Semester	**: IV**		
Prerequisites	**: Computer programming through C and Data structures using C Labs**		
Courses to which it is a prerequisite	**: Web Programming Lab**		

Course Outcomes (COs):

1	**Use Object oriented Programming concepts**
2	**Apply multi-threading.**
3	**Use Exception Handling.**
4	**Create GUI based applications using AWT.**
5	**Develop network based applications.**

CourseOutcome Versus **ProgramOutcomes** Versus **Program Specific Outcomes:**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO-1	3	3			3	2							2		
CO-2	2	3										3	2		
CO-3	3	3	2	3	3				2				3		
CO-4	3	3	3										3		
CO-5	3	3	3		3					2			3		

3 - Strongly correlated, 2 - Moderately correlated, 1-Weakly correlated,Blank – No correlation

Assessment Methods:	Lab Internal Exam/Day-to-Day Analysis (observation, record and viva)

Teaching-Learning and Evaluation

WEEK	TOPIC / CONTENTS DEVELOP JAVA PROGRAMS	COURSE OUTCOMES	Sample questions	TEACHING-LEARNING STRATEGY	ASSESSMENT METHOD & SCHEDULE
1	That prints welcome dear user followed by user name,Printing multiplication table, Printing prime numbers upto an integer	CO-1	1. Write a program to print the multiplication table (till 20) of a given number.	→Lecture →PPT	Day-to-Day Analysis Lab-Internal-I (Week 9)
2	To calculate Perimeter and area of rectangle, fibonaci sequence	CO-1		→Lecture →PPT	
3	Matrix multiplication, String palindrome or not, sorting names in ascending order	CO-1	1. Create a class Rectangle. The class has attributes length and width. It should have methods that calculate the perimeter and areaof the rectangle. It should have readAttributes method to read length and width from user. 2. Write a program to create an abstract class named Shape that contains an empty method named numberOfSides( ).Provide three classes named Trapezoid, Triangle and Hexagon such that each one of the classes extends the class Shape. Each one of the classes contains only the method numberOfSides ( ) that shows the number of sides in the given geometrical figures.(Use Runtimepolymorphism).	Lecture Discussion	
4	Inheritance hierarchy, Abstract class shape	CO-1		Lecture Discussion	
5	Illustrates packages	CO-1	1. Write a program that displays the number of characters, lines and	Lecture PPT	
6	Demonstrate wrapper classes, roots of quadratic equation, Vector class	CO-1		Lecture PPT Discussion	

7	File properties, displays number of characters, words and lines in a file , copying content from one file to other.	CO-4	words in a text file. 2. Write a program to generate a set of random numbers between two numbers x1 and x2, and x1>0. 3. Create a user defined exception.	☒ Lecture ☒ PPT ☒ Discussion	
8	Random Number Generation, StringTokenizer, Java API for date	CO-4		☒ Lecture ☒ PPT	
9	**LAB INTERNAL-I**				
10	Exception handling and user defined exception	CO-2		☒ Lecture ☒ PPT	
11	Multithreading	CO-2		☒ Lecture ☒ PPT	
12	Producer consumer problem	CO-2		☒ Lecture ☒ PPT	
13	Applet that displays simple message, Applet program for factorial	CO-4	1. Develop an applet that receives an integer in one text field, and computes its factorial Value and returns it in another text field, when the button named "Compute" is clicked. 2. Write a program for handling mouse events with adapter classes. 3. Write a program that illustrates JTabbedPane, JScrollPane and JTable.	☒ Lecture ☒ PPT	
14	Graphics in windowed environment, AWT controls	CO-4		☒ Lecture ☒ PPT	Day-to-Day Analysis
15	Handling mouse events, simple calculator, Traffic light	CO-4		☒ Lecture ☒ PPT	Lab-Internal-II (Week 18)
16	JTable illustration	CO-4		☒ Lecture ☒ Discussion	
17	Simple client/server illustration	CO-5	1. Write a program that implements a simple client/server application. The client sends data to a server. The server receives the data, uses it to produce a result, and then sends the result back to the client. The client displays the result on the console.	☒ Lecture ☒ Discussion	
18	**LAB INTERNAL-II**				
19/20	**END EXAM**				