# **SCHEME OF COURSE WORK**

#### **Course Details:**

<b>Course Title</b>	: OBJECT ORIENTED PROGRAMMING LAB						
Course Code	: 15CT1113	L	ΤР	С	:0032		
Program:	: B.Tech.						
Specialization:	: CSE						
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.

### Course Outcome Versus Program Outcomes:

COs	PO1	PO2	PO3	PO4	PO5	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>	PO11
CO-1	S	S			S	Μ					
CO-2	М	S									
CO-3	S	S	М	S	S				Μ		
<b>CO-4</b>	S	S	S								
CO-5	S	S	S		S					М	

S - Strongly correlated, M - Moderately correlated, Blank - No correlation

Assessment Methods:

## **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
2	To calculate Perimeter and area of rectangle, fibonaci sequence	CO-1		→Lecture →PPT	Analysis Lab-Internal-I (Week 9)
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	Lecture 상 Discussion	
4	Inheritance hierarchy, Abstract class shape	CO-1	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).	X Lecture Discussion	
5	Illustrates packages	CO-1	1 Write a program that	ど Lecture ど PPT	
6	Demonstrate wrapper classes, roots of quadratic equation, Vector class	CO-1	<ol> <li>Write a program that displays the number of characters, lines and</li> </ol>	ど Lecture ど PPT ど Discussion	

7       Prile properties, displays futured of characters, words and lines in a file , copying content from one file to other.       Co-4       Worts in a text file.       3       Learne       Discussion         8       Random Number Generation, StringTokenizer, Java API for date content from one file to other.       Co-4       3. Create a user defined exception.       Use Instruct.		File properties, displays number of		words in a text file.		
1     Characters, words and lines in a mile, copying content from one file to other.     2     Write a program to generate as set of random numbers set and a x1, and x1,	7	File properties, displays number of	CO-4			
100 pring content non one ine to order.     numbers between two numbers x1 and x2, and x1>0.     texture       9     Las Intersect.     2.       10     Exception handling and user defined exception.     3. Create a user defined exception.     3. Create a user defined exception.       11     Multithreading     CO-2     3. Create a user defined exception.     3. Create a user defined exception.       12     Producer consumer problem     CO-2     1. Develop an applet that receives an integer in one text field, and computes its factorial value and returns it in another text field, and compute's is clicked.     3. Vite a program for factorial another text field, and compute's is clicked.       15     Handling mouse events, simple calculator, Traffic light     CO-4     1. Develop an applet that reture is made value and returns it in another text field, and compute's is clicked.       16     JTable illustration     CO-4     Write a program that illustrates JTabbedPane, JScroll'ane and JTable.       17     Simple client/server illustration     CO-5     1. Write a program that illustrates 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 server receives the data, uses it to produce a result and then sends the result back to the client. The server application. The client displays the result on the console.					0 DISCUSSION	
8       Random Number Generation, StringTokenizer, Java API for date       Co.4       and x1>0.       8       Letures         9       LaTuresw1       3. Create a user defined exception       3. Create a user defined exception.		copying content from one file to other.		numbers between		
10     Exception handling and user defined exception     co-2     5. Create a user defined exception.     g     Lecture by FPT       11     Multithreading     co-2     is create a user defined exception.     g     Lecture by FPT       12     Producer consumer problem     co-2     is create a user defined exception.     g     Lecture by FPT       13     Applet that displays simple message, Applet program for factorial AVT controls     co-4     is create and returns in another text field, and computes its factorial Value and returns in another text field, when the button named "Compute" is clicked.     b     Lecture by FPT     Day-to-Day Analysis       16     JTable illustration     co-4     co-4     is user and returns in another text field, when the button named "Compute" is clicked.     g     Lecture by FPT     Day-to-Day Analysis       16     JTable illustration     co-4     co-4     is user and returns in another text field, when the button named "Compute" is clicked.     g     Lecture by FPT     biscussion       16     JTable illustration     co-5     1. Write a program that inplements 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 black to the client. The client displays the result on the console.     d     leture by Day		StringTokenizer, Java API for date	CO-4			
exception       CO-2       exception       8       PPT         11       Multithreading       CO-2       Statute       Statute         12       Producer consumer problem       CO-2       Statute       Statute         13       Applet that displays simple message, Applet program for factorial       CO-4       1. Develop an applet that receives an integer in one computes its factorial       Statute       Day-to-Day Amayais         14       Graphics in windowed environment, AWT controls       CO-4       the button named "Compute" is clicked.       Statute       Day-to-Day Amayais         15       Handling mouse events, simple calculator, Traffic light       CO-4       Write a program for handling mouse events       Statute       Statute" Discussion       Day-to-Day Amayais         16       JTable illustration       CO-4       Write a program that illustrates JTabbedPane, JSrcolPane and JTable.       Statute" Discussion       Statute" 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.       Statute       Statute	9			3. Create a user defined		
12       Producer consumer problem       CO-2       Image: Co-3       Image: Co-3 <thimage: co-3<="" th="">       Image: Co-3</thimage:>	10		CO-2	exception.	∀ Lecture ∀ PPT	
12       Producer consumer problem       CO-2         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       Simplet curve PPT         14       Graphics in windowed environment, AWT controls       CO-4       1. Develop an applet that receives an integer in one computes its factorial Value and returns it in omther text field, when the button named "Compute" is clicked.       Simple clicure PPT       Day-to-Day Analysis         16       JTable illustration       CO-4       CO-4       Simple clicut/server illustration       Simple clicut/server illustration         17       Simple client/server illustration       CO-5       1. Write a program that implements a simple client/server application. The client 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.       Simple client/server. It is law integer in one server. The server       Simple client. The client displays the result on the console.	11	Multithreading	(0-2		X Lecture	
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, and       Image: Co-4       Image: Co-4 </th <th>12</th> <th>Producer consumer problem</th> <th></th> <th></th> <th>&amp; Lecture</th> <th></th>	12	Producer consumer problem			& Lecture	
AWT controls       CO-4       computes its factorial Value and returns it in another text field, when the button named "Compute" is clicked.       8       PPT       Day-to-Day Analysis         15       Handling mouse events, simple calculator, Traffic light       CO-4       co-4       Co-4       8       Day-to-Day Analysis       Day-to-Day Analysis         16       JTable illustration       CO-4       CO-4       CO-4       2. Write a program for handling mouse events with adapter classes.       3. Write a program that illustrates JTabbedPane, JScrollPane and JTable.       8       Lecture       8       Lecture       8       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.       18       Let Internat-II	13				X Lecture	
16       JTable illustration       CO-4       another text flow, when the button named "Compute" is clicked.       Vertice a program for handling mouse events with adapter classes.       Vertice a program for Just adapter classes.         16       JTable illustration       CO-4       Vertice a program for Just adapter classes.       Vertice a program for Just adapter classes.         17       Simple client/server illustration       CO-5       1. Write a program that implements a simple client/server program that implements a simple client/server program. 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.       Vertice Letter back to the client. The client displays the result on the console.         18       Las Intersou-JI       Implements       Las Intersou-JI	14	•	CO-4	computes its factorial	ど Lecture ど PPT	
16       JTable illustration       CO-4       the button named "Compute" is clicked.       Week 18)       (Week 18)         16       JTable illustration       CO-4       Write a program for handling mouse events with adapter classes.       3. Write a program that illustrates JTabbedPane, JScrollPane and JTable.       Volume	15	Handling mouse events, simple			0	Lab-Internal-II
16       Ji able illustration       Co-4       handling mouse events with adapter classes.       8       Lecture Discussion         3. Write a program that illustrates JTabbedPane, JScrollPane and JTable.       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.       V       Lecture         18       Las INTERNAL-II       Implements       Implements       Implements       Implements		calculator, Traffic light	CO-4	"Compute" is clicked.	0 111	
Implements a simple client/server implements a simple client/server application.       Discussion         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.         18       LAB INTERNAL-II       Implements       Implements	16	JTable illustration	CO-4	handling mouse events with adapter classes. 3. Write a program that illustrates JTabbedPane, JScrollPane and	∀ Lecture ∀ Discussion	
	17	Simple client/server illustration	CO-5	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		
19/20 END EXAM	18	LAB INTERNAL-II				
	19/20	END EXAM				