



**S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT
& RESEARCH, NAGPUR.**

(An Autonomous Institute, Affiliated to RTMNU, Nagpur)



DEPARTMENT OF EMERGING TECHNOLOGIES (AI&ML and AI&DS)

"Become an excellent center for Emerging Technologies in Computer Science to create competent professionals"

SESSION: 2023-24

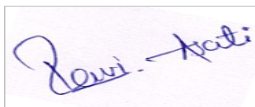
Year/ Semester: II/IV

LIST OF PRACTICALS/ MODULES

Name of Lab Course: Object Oriented Programming Lab (PCCAD403P)

Sr. No	Aim of Practical	CO
PRE-LAB	Installation of JDK -17, Eclipse IDE for Java Developer.	CO1
1.	Create two objects of class 'CompanyData', one is with a default constructor and another one using a parameterized constructor to display the output as- Name Employee Age of Employee Gender of Employee Employee ID	CO2
2.	Raghav is assigned with the task to develop a code for finding out the perimeter and area of a circle given a value of radius. He should use Math.PI constant in his program. If radius is zero or less than zero then print " please enter non zero positive number ". Can you help raghav for developing the code.	CO1
3.	Alisha is assigned with the task to design a code for finding out the volume of cube, the volume of cylinder, the volume of Box using method overloading concept. Can you Help alisha to achieved the task	CO1
4.	Find the method printName. Notice the comment lines showing where you should put your code. This has a name passed into it with the format "<first name> <last name>". You will reformat it to be "<last name>, <first name> and print it out. Example:	CO1

	<p>“Bill Joy” becomes “Joy,Bill”</p> <p>There will always be at least one space between the first and the last name. There may be extra spaces between the first and last names and extra spaces at the beginning and end of the name passed in. You will have to strip these out if they are there.</p>	
5.	Create a class Emerging_Technologie for Hierarchical inheritance, from a single parent class (Emerging_Technologie), inheriting multiple child classes such as class AIML, class AIDS, and class CSE.	CO2
6.	Construct the code using given statement Create a class First in learnjava package that access it in another class Second by using import keyword.	CO4
7.	<p>a. Create a class Solution. It will be given two integers x and y as input, you have to compute x/y. If x and y are not 32 bit signed integers or if y is zero, an exception will occur and you have to report it.</p> <p>b. Create a method named validate() that accepts an integer as a parameter. If the age is less than 18, we are throwing the ArithmeticException otherwise print a message welcome to vote.</p>	CO2
8.	Rahul wants to design the concept of multithreading, execution of threads occurs in random order. Do the necessary coding which includes suspend (), resume(), stop() method.	CO4
9	<p>Execution of two or more threads occurs in a random order. The keyword ‘synchronized’ in Java is used to control the execution of thread in a strict sequence. In the following, the program is expected to print some numbers. Do the necessary use of ‘synchronized’ keyword, so that, the program prints the output in the following order:</p> <p>-----OUTPUT-----</p> <p>5 10 15 20 25 30 35 40 45 50</p> <p>-----</p>	CO4
10.	Design a Java 8 program to get the sum of all numbers present in a list.	CO4
POST LAB	Open Ended Practical.	CO1



Lab Course In-charge