



**B. P. Poddar Institute of Management & Technology**  
**Department of Electronics & Communication Engineering**  
**Academic Year: 2018-19, Semester: Even**



**List of experiments**

**OBJECT ORIENTED PROGRAMMING (EC 695A)**

<b>TOPIC</b>	<b>LIST OF EXPERIMENTS</b>	<b>CO</b>	<b>PO/ PSO</b>
Assignments on class, constructor, overloading, inheritance, overriding	<ol style="list-style-type: none"> <li>Design a class to represent a bank account. Include the following members              Data members             <ul style="list-style-type: none"> <li>Name of the depositor</li> <li>Account number</li> <li>Type of account</li> <li>Balance amount in the account</li> </ul>             Methods             <ul style="list-style-type: none"> <li>To assign initial values</li> <li>To deposit an amount</li> <li>To withdraw an amount</li> <li>To display the name and balance</li> </ul> </li> <li>Create a class Room to display the length, breadth and area of a room. The Room class has the following data member and member functions:              Data member:             <ul style="list-style-type: none"> <li>Length of the room</li> <li>Breadth of the room</li> </ul>             Member function             <ul style="list-style-type: none"> <li>getdata() -----To initialize the values of length and breadth</li> <li>display()----To display the values of length, breadth and area</li> </ul> </li> <li>Implement the assignment above using the constructor.</li> <li>A class BedRoom inheriting the class Room. Bedroom has the data member height. Using constructor write a java program to display the volume of the room .</li> <li>Create a base class called shape. Use this class to store two double type values that could be used to compute the area of figures. Derive two specific classes called triangle and rectangle from the base shape. Add to the base class, a member function get_data() to initialize base class data members and another member function display_area() and redefine this function in the</li> </ol>	<b>CO1, CO2</b>	<b>PO1, PO2, PO3, PO4, PO8, PO9, PO10, PO12, PSO2</b>

	derived classes to suit their requirements. Using these three classes, design a program that will accept dimensions of a triangle or a rectangle interactively, and display the area.		
Assignments on wrapper class, arrays	<p>1. Create an array of integers (take input from input device) and display the array elements. Sort the array in ascending order.</p> <p>2. WAP to create &amp; display a 2D Array. Find the max &amp; min from each row, each column and each diagonal.</p> <p>3. Create an array of n names (take names from input device). Sort the names in descending order.</p> <p>4. Write a Java class CmdLine to print the number of arguments passed on the command line as well as the 1st letter of the arguments. For example if the command line arguments are : “Electronic Communication Engineering”. Then the output will be :- No of arguments = 3, E.C.E.</p> <p>5. Write a program to handle an arithmetic exception.</p> <p>6. Write a program to convert Primitive data type to Object data type &amp; vice versa using Wrapper class.</p>	CO1	PO1, PO2, PO3, PO4, PO8, PO9, PO10, PO12, PSO2
Assignments on developing interfaces- multiple inheritance, extending interfaces	<p>1. Write a java program that illustrates the multiple inheritances by using interfaces.</p> <p>2. Class Student stores the roll-number, class test stores the marks obtained in two subjects and class result contains the total marks obtained in the test .The class result can inherit the details of the marks obtained in the test and the roll-number of the students through multilevel inheritance.</p>	CO2	PO1, PO2, PO3, PO4, PO8, PO9, PO10, PO12, PSO2
Assignments on creating and accessing packages	<p>1. Create a class named FIRST and keep it in a package named MY_FIRST_PACKAGE. Create another class named as SECOND, this class should be able to access every method and variables declared within the FIRST class.</p>	CO4	PO1, PO2, PO3, PO4, PO8, PO9, PO10, PO12, PSO2
Assignments on multithreaded programming	<p>1. Write a program that can run a main thread and three child thread simultaneously.</p> <p>2. Write a program to implement the concept of Exception Handling using predefined exception.</p>	CO3	PO1, PO2, PO3, PO4, PO8,

			<b>PO9, PO10, PO12, PSO2</b>
Assignments on applet programming	1. Develop an applet that receives three numeric values as input from the user and then displays the largest of the three on the screen. Write a HTML page and test the applet.	<b>CO5</b>	<b>PO1, PO2, PO3, PO4, PO8, PO9, PO10, PO12, PSO2</b>
Additional Program	<ol style="list-style-type: none"> <li>1. Write a program to implement the concept of Exception Handling by creating user defined exceptions.</li> <li>2. Write a program that uses the GregorianCalendar class to display a calendar for the current month. The current date should be marked with *.</li> </ol>	<b>CO6</b>	<b>PO1, PO2, PO3, PO4, PO8, PO9, PO10, PO12, PSO2</b>