**Smt. Chandaben Mohanbhai Patel Institute of Computer Applications**

**Sub: CA327: Object Oriented Programming through JAVA**

**Practical Assignment-5**

1. Write a program to show the use of static keyword in java.
2. Write a program to show the use of this keyword in java.
3. Create person class with data members as person\_id& name. Derive two classes Student & faculty from it. The fields of Student are course name & fees paid. The fields of faculty are subject name & number of years’ experience. Use proper method to accept values & Override display method.
4. Create employee class with employee number, name & basic salary. Create a class manager which is subclass of employee class, having fields department name & incentive. Use constructor & write a method to calculate salary.
5. Create an abstract class Shape which consists of method area. Create three subclasses Rectangle, Circle and Triangle and calculate area.
6. Create an abstract class Person. Derive two classes Employee and Worker from it. Use proper method to accept and display the details for the same. The fields of Employee are Emp\_no,Emp\_name and address. Similar fields for worker are name and working hour.
7. Define an Employee class with suitable attributes having getSalary() method, which returns salary withdrawn by a particular employee. Write a class Manager which extends a class Employee, override the getSalary () method, which will return salary of manager by adding traveling allowance, house rent allowance etc.
8. Declare an abstract class vehicle with an abstract method name numwheels(). Provide the two subclasses two-wheeler and four wheelers, each one of which implements this method. Create instance of these two subclasses and demonstrate the use of numwheels() method.
9. Write a program to Design a Shape as an interface and then Design class for Rectangle, Triangle and Hexagon which implements the interface and override method drawShape().
10. Write a program to create interface A in this interface we have two methods which will display variables/message of class and method2() which will print “method 2”. Implements this interface in another class named MyClass.