**Python Lab**

**Class: SE IT Sem IV**

**Academic Year: 2018-19**

**Python- Basic Programs LO1**

* Display the student grade based on marks scored.
* WAP to perform Arithmetic operations by accepting two numbers from user.
* WAP to find the largest number out of 3 nos
* WAP to display all odd/even numbers between 1 to 100
* WAP to display sum of digits of a given number
* Display the factorial of a number entered by the user.

**Python- LIST LO1**

* Find the largest and smallest number in an array.
* Search for an element in a List, display the position if found
* Demonstrate the use of 10 inbuilt LIST methods
* Demonstrate use of SLICE() in 6 different ways

**Python- Function LO2**

* Write a python program to calculate library fine-(book category, no of days, fine increment, book lost).
* Write a python program to calculate monthly payment-(no of days, overtime, emptype, etc).
* Add two distances d1 and d2 (feet and inches), display the sum.
* Display Fibonacci series using recursive method.

**Python- String LO2**

* Count the blank spaces and words in a given string
* Count the frequency of ‘a’ in a given string.
* Count the number of each vowel in a given string.
* Arrange the words from a string in alphabet order.
* Remove all punctuations from a given string

**Python- Object Oriented Programming LO3**

* To display the square of a given number.
* To perform Arithmetic Operations by accepting two numbers from user.
* Accept value for Radius and then calculate Area and Perimeter of a Circle
* Accept two distances (feet & Inches) then display the sum.
* WAP to demonstrate Inheritance & Polymorphism concepts
* WAP to demonstrate Exception handling.

**Python- File Handling LO4**

* Python programs to understand different File handling operations
* Show the use of Pickle, Lambda, map, filter, etc.

**GUI Programming and Database Connection LO5**

* Design GUI for LOGIN BOX and establish database connection
* Design GUI to manipulate employee information stored in MySQL database
* Design multiple graphical interfaces required for Online Store