

## **PYTHON PROGRAMMING LAB**

**Course Code: CSE 322****Credit Units: 01****Total Hours: 20****Course Objective:**

To write and execute programs in python to solve problems using data structures such as lists, tuples, dictionaries. To write and execute write programs in python to implement various networking, web applications

**SOFTWARE REQUIREMENTS:** Python 3.6**Course Contents:**

Lab Experiments are based on the course Python Programming (CSE 302)

**List of experiments/demonstrations:**

1. Write a python program to demonstrate working of lists.: **(2 Hours)**
2. Write a python program to demonstrate working of tuples.: **(2 Hours)**
3. Write a python program to demonstrate working of dictionaries and conditional statements: **(2 Hours)**
4. Write a python program to demonstrate working of Inheritance and other OOP concepts.: **(2 Hours)**
5. Write a python program to demonstrate regular expressions like match function, search function, pattern search function.: **(2 Hours)**
6. Write a python program for reading data from CSV file.: **(2 Hours)**
7. Write a python program for writing data in CSV file.: **(2 Hours)**
8. Write a python program for reading data from text file.: **(2 Hours)**
9. Write a python program for writing data from text file.: **(01 Hour)**
10. Write a python program for image analysis using open CV.: **(01 Hour)**
11. Write a program to demonstrate connection with postgresql: **(01 Hour)**
12. Develop a dynamic website using Django framework and postgresql as backend.: **(1 Hour)**

**Course Outcomes:**

- Ability to create client-server application for real world problems.
- Ability to develop multithreaded application.
- Ability to create web application for real world problem.

**Examination Scheme:**

IA			EE			
A	PR	Practical Based Test	Major Experiment	Minor Experiment	LR	Viva
5	10	15	35	15	10	10

Note: IA –InternalAssessment, EE- External Exam, A- Attendance, PR- Performance, LR – Lab Record, V – Viva.

**Text & References:**

- Core Python Programming, Wesley J. Chun, Publisher: Prentice Hall PTR, First Edition.
- Python: The Complete Reference, Martin C Brown, McGraw Hill Publications.
- Programming Python, Mark Lutz, O'Reilly. Ltd., Second Edition.