Semester:III	CIE Marks:40
Subject Code:20MCA36	SEE Marks:60
Contact Hours(L:T:P):0:0:4	Exam Hours:03

## Course Outcomes:

- 1. Develop python program to perform search/sort on a given data set
- 2.Demonstrate object oriented principles
- 3. Demonstrate data visualization using Numpy for a given problem
- 4. Demonstrate regression model for a given problem
- 5.Deign and develop an application for the given problem
- 1. Write a Python program to perform linear search
- 2. Write a Python program to insert an element into a sorted list
- 3. Write a python program using object oriented programming to demonstrate encapsulation, overloading and inheritance
- **4.**Implement a python program to demonstrate
- 1) Importing Datasets 2) Cleaning the Data 3) Data frame manipulation using Numpy
- 5.Implement a python program to demonstrate the following using NumPy
- a) Array manipulation, Searching, Sorting and splitting.
- b) broadcasting and Plotting NumPy arrays
- 6. Implement a python program to demonstrate

Data visualization with various Types of Graphs using Numpy

- 7. Write a Python program that creates a mxn integer arrayand Prints its attributes using matplotlib
- 8. Write a Python program to demonstrate the generation of linear regression models.
- 9. Write a Python program to demonstrate the generation of logistic regression models using Python.
- 10. Write a Python program to demonstrate Timeseries analysis with Pandas.
- 11. Write a Python program to demonstrate Data Visualization using Seaborn.

## Part-B

- 6. Students shall carry out a mini project using python/pandas to demonstrate the data analysis.
- 7. A team of two students must develop the mini project. However during the examination, each student must demonstrate the project individually.
- 8. The team must submit a brief project report (20-25 pages) that must include the following