**COLLEGE OF ENGINEERING, CHENGANNUR**

**20MCA241 DATA SCIENCE LAB**

**LAB CYCLES**

**Lab cycle-1**

**Experiment No.1**

Review of python programming

**Experiment No.2**

Matrix operations (using vectorization) and transformation using python and SVD using python.

**Experiment No.3**

Programs using matplotlib / plotly / bokeh / seaborn for data visualization

**Experiment No.4**

Programs to handle data using pandas.

**Lab cycle-2**

**Experiment No.5**

Implementation of KNN classification algorithm

**Experiment No.6**

Implementation of K-means clustering algorithm

**Experiment No.7**

Implementation of Naïve Bayes classification algorithm

**Experiment No.8**

Implementation of Decision Tree classification algorithm

**Lab cycle-3**

**Experiment No.9**

Implementation of Linear Regression techniques

**Experiment No.10**

Image classification using convolutional neural networks

**Lab cycle-4**

**Experiment No.11**

Implementation of Part of Speech tagging, N-gram, smoothening and Chunking using NLTK

**Experiment No.12**

Text classification using support vector machines

**Experiment No.13**

Implementation of a simple web-crawler and scrapping web pages