

## Department of Computer Science & Engineering

Final Year B. Tech. (CSE) – I : 2022-23

### 5CS462 : PE5 - Data Mining Lab

#### Assignment No. 6

Use / extend the data analysis tool (menu driven GUI) developed in Assignment No. 1 to perform the following task :

1. Design and implement the following clustering algorithm:
  - a) Hierarchical clustering - AGNES & DIANA. Plot Dendrogram.
  - b) *k*-Means
  - c) *k*-Medoids (PAM)
  - d) DBSCAN
2. Tabulate the results with cluster validation accuracy
3. Use the following data sets from UCI machine learning repository :
  - a) IRIS
  - b) Breast Cancer
  - c) For DBSCAN, use *US Census Data (1990) Data Set*  
[https://archive.ics.uci.edu/ml/datasets/US+Census+Data+\(1990\)](https://archive.ics.uci.edu/ml/datasets/US+Census+Data+(1990))

**Deadline : 02/10/2022**

**Dr. B. F. Momin**  
**Course Teacher**