|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **P.V.P SIDDHARTHA INSTITUTE OF TECHNOLOGY (AUTONOMOUS)** | | | | |
| **Branch : Computer Science and Engineering** | | **Regulation : PVP20** | | |
| **Course: B. Tech** | **Academic Year:2023-24** | | **Subject : Machine Learning** | |
| **Subject Code: 20CS3602** | **Year and Semester: III Year / II Sem** | | | **Section: I, II, III** |
| **ASSIGNMENT-II** | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Q.**  **NO** | **QUESTION** | **CO** | **LEVEL** |
| **1** | Apply ensemble methods for classification using the bagging approach. | **2** | **L3** |
| **2** | Compare K-Nearest Neighbour (KNN) algorithm and the Weighted K-Nearest Neighbour (WKNN) algorithm, and how do these differences impact the accuracy and efficiency of these algorithms in practice? | **4** | **L4** |
| **3** | Analyze the CADET system employs case based reasoning to assist in the conceptual design of Simple mechanical devices such as water faucets (pump). | **4** | **L4** |
| **4** | Calculate three iterations of K-Means Clustering on a Two- Dimensional dataset containing six data points {(1,1) , (2,1), (1,4), (4,3), (5,4), (6,5)} using K=2, and the initial cluster centroids are c1=(1,1) and c2=(2,1). | **4** | **L4** |
| **5** | Examine how the DBSCAN algorithm performs cluster analysis by making use of Silhouette Coefficient measure? | **4** | **L4** |