

## **MACHINE LEARNING ASSIGNMENT – 1 (Answers)**

**Q1 Ans:** 4

**Q2 Ans:** 1,2&4

**Q3 Ans:** formulating the clustering problem

**Q4 Ans:** Euclidean distance

**Q5 Ans:** Divisive clustering

**Q6 Ans:** All answers are correct

**Q7 Ans:** Divide the data points into groups

**Q8 Ans:** Unsupervised learning

**Q9 Ans:** Diverse clustering

**Q10 Ans:** K-means clustering algorithm

**Q11 Ans:** All of the above

**Q12 Ans:** Labeled data

**Q13 Ans:** Cluster analysis is calculated by Euclidian Distance between two observations, which is the square root of the sum of squared distance.

**Q14 Ans:** Cluster quality is measured using the average silhouette coefficient value of all objects in the data set.

**Q15 Ans:** The dataset is divided into clusters to create a tree-like structure, which is also called a dendrogram. The observations or any number of clusters can be selected by cutting the tree at the correct level. When we try to group a set of objects that have similar kind of characteristics, attributes these groups are called clusters. The process is called clustering. Types of cluster analysis are, Centroid-based Clustering, Density-based Clustering, Distribution-based Clustering, Hierarchical Clustering.