Machine learning

Assignment -1

Q1- B 4

Q2- D- 1,2 and 4

Q3- D- Formulating the cluster problem

Q4- A - Euclidean distance

Q5- B - Divisive clustering

6 - B- Number of cluster

7- A- Divide the data points into group

8- B Unsupervised learning

9- D- All of the above

10- A- k means clustering algorithm

11- D- All of the above

12 A- Labeled data

Q13 measuring the distance between each data point and its centroid, squaring this distance, and summing these squares across one cluster.

Q14 To measure the quality of a clustering, we can use the average silhouette coefficient value of all objects in the data set.

Q15 It is a type of clustering model closely related to statistics based on the modals of distribution. Objects that belong to the same distribution are put into a single cluster. This type of clustering can capture some complex properties of objects like correlation and dependence between attributes.

Types of Clustering

- Centroid-based Clustering.
- Density-based Clustering.
- Distribution-based Clustering.
- Hierarchical Clustering.