MACHINE LEARNING

Answers of Following Questions-

Ans 1-(b) 4

Ans 2-(d) 1, 2 and 4

Ans 3-(d) formulating the clustering problem

Ans 4-(a) Euclidean distance

Ans 5-(b) Divisive clustering

Ans 6-(d) All answers are correct

Ans 7-(a) Divide the data points into groups

Ans 8-(b) Unsupervised learning

Ans 9-(d) All of the above

Ans 10-(a) K-means clustering algorithm

Ans 11-(d) All of the above

Ans 12-(a) Labeled data

Ans 13-The hierarchical cluster analysis follows three basic steps:-

1) calculate the distances

2) link the clusters

3) choose a solution by selecting the right number of clusters

Ans 14-To measure the quality of a clustering, we can use the average silhouette coefficient value of all objects in the data set

Ans 15-Cluster analysis is a data analysis technique that explores the naturally occurring groups within a data set known as clusters.

types of clustering are:-

Density-Based Clustering

DBSCAN (Density-Based Spatial Clustering of Applications with Noise)

OPTICS (Ordering Points to Identify Clustering Structure)

HDBSCAN (Hierarchical Density-Based Spatial Clustering of Applications with Noise)

Hierarchical Clustering

Fuzzy Clustering

Partitioning Clustering

PAM (Partitioning Around Medoids)

Grid-Based Clustering