MACHINE LEARNING

Q1 to Q12 have only one correct answer. Choose the correct option to answer your question.

1. What is the most appropriate no. of clusters for the data points represented by the following dendrogram:
   Ans: b) 4

2. In which of the following cases will K - Means clustering fail to give good results?
   Ans: d) 1, 2 and 4

3. The most important part of is selecting the variables on which clustering is based.
   Ans: d) formulating the clustering problem

4. The most commonly used measure of similarity is the or its square.
   Ans: a) Euclidean distance

5. _is a clustering procedure where all objects start out in one giant cluster. Clusters are formed by dividing this cluster into smaller and smaller clusters.
   Ans: Divisive clustering

6. Which of the following is required by K-means clustering?
   Ans: D) All answers are correct

7. The goal of clustering is to
   Ans: a) Divide the Data point into group.

8. Clustering is a
   Ans: b) unsupervised learning.

9. Which of the following clustering algorithms suffers from the problem of convergence at local optimal?
   Ans: d) All of the above.

10. Which version of the clustering algorithm is most sensitive to outliers?
    Ans: a) K-means clustering algorithm.

11. Which of the following is a bad characteristic of a dataset for clustering analysis___
    Ans: All of the above

12. For Clustering, we don't require___
    Ans: A labelled data.

13. How is cluster analysis calculated?
    Ans: Cluster analysis is a data analysis technique that explores the naturally occurring groups within a data set known as clusters.

14. How is cluster quality measured?
    Ans: We can measure the quality of Clustering by using the Dissimilarity/Similarity metric in most situations.

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15. What is cluster analysis and its types?

Ans: Cluster analysis in statistics is a method to organize data by clustering data points in a particular cluster.

Types of the Clusters:

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