2. In which of the following cases will K-Means clustering fail to give good results?

Ans : D

Data points with outliers, Data points with different densities, Data points with non-convex shapes

4. The most commonly used measure of similarity ${f is}$ the ${f or}$ 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 : B

Divisive

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 : D

All of the above

8. Clustering is a-

Ans :- A

Supervised learning

- 9. Which of the following clustering algorithms suffers from the problem of convergence at local optima?
- Ans : A

K- Means clustering

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 :- D
All of the above

12. For clustering, we do **not** require-

Ans :- A Labeled data

- 13. How **is** cluster analysis calculated?
- 14. How **is** cluster quality measured?
- 15. What **is** cluster analysis **and** its types?

Ans:-

Cluster Analysis **is** the process to find similar groups of objects **in**

order to form clusters. It **is** an unsupervised machine learning-based algorithm that

acts on unlabelled data.

It **is** the basic **and** most important step of data mining **and** a common

technique **for** statistical data analysis, **and** it **is** used **in** many fields

such as data compression, machine learning, pattern recognition, information retrieval etc.

Types Of cluster Density-based Clustering Distribution-based Clustering Centroid-based Clustering Hierarchical Cluster Analysis