

MACHINE LEARNING

1. Which of the following is an application of clustering?

Ans. d. All of the above

2. On which data type, we cannot perform cluster analysis?

Ans. d. None

3. Netflix's movie recommendation system uses

Ans. c. Reinforcement learning and Unsupervised learning

4. The final output of Hierarchical clustering is

Ans. b. The tree representing how close the data points are to each other

5. Which of the step is not required for K-means clustering?

Ans. d. None

6. Which of the following is wrong?

Ans. c. k-nearest neighbour is same as k-means

7. Which of the following metrics, do we have for finding dissimilarity between two clusters in hierarchical clustering? i. Single-link ii. Complete-link iii. Average-link

Ans. d. 1, 2 and 3

8. Which of the following are true? i. Clustering analysis is negatively affected by multicollinearity of features ii. Clustering analysis is negatively affected by heteroscedasticity Options:

Ans. d. None of them

9. In the figure above, if you draw a horizontal line on y-axis for $y=2$. What will be the number of clusters formed?

Ans. a. 2

10. For which of the following tasks might clustering be a suitable approach?

Ans. a. Given sales data from a large number of products in a supermarket, estimate future sales for each of these products.

11. Given, six points with the following attributes:

Ans. a

12. Given, six points with the following attributes:

Ans. b

13. What is the importance of clustering?

Ans. Clustering helps in understanding the natural grouping in a dataset. Their purpose is to make sense to partition the data into some group of logical groupings. Clustering quality depends on the methods and the identification of hidden patterns.