

Answers for Machine Learning

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

Answer d. All of the above

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

Answer d. None

3. Netflix's movie recommendation system uses-

Answer c. Reinforcement learning and Unsupervised learning

4. The final output of Hierarchical clustering is

Answer 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?

Answer d. None

6. Which of the following is wrong?

Answer c. k-nearest neighbor is same as k-means

7. Which of the following metrics, do we have for finding dissimilarity between two clusters in hierarchical clustering?

Answer d. 1, 2 and 3

8. Which of the following are true?

Answer a. 1 only

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?

Answer a. 2

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

Answer b. Given a database of information about your users, automatically group them into different market segments.

11. Which of the following clustering representations and dendrogram depicts the use of MIN or Single link proximity function in hierarchical clustering:

Answer a.

12. Which of the following clustering representations and dendrogram depicts the use of MAX or Complete link proximity function in hierarchical clustering.

Answer b.

13. What is the importance of clustering?

Answer Clustering helps in eliminating inefficiency in the model. Clustering Quality depends on methods and identification of hidden applicable patterns. They are used for outliers detection. Clustering helps in grouping the dataset

14. How can I improve my clustering performance?

Answer Graph-based clustering performance can be improved by applying ICA blind source separation during the graph Laplacian embedding Applying unsupervised feature learning to input data using either RICA or SFT, improves clustering performance