Machine Learning

1. All the above
2. None
3. Reinforcement learning and Unsupervised learning
4. The tree representing how close the data points are to each other
5. None
6. K-nearest neighbor is same as K-means
7. 1, 2 and 3
8. 1 only
9. 2
10. Given sales data from a large number of products in a supermarket, estimate future sales for each of these products
11. Answer: D
12. Answer: C
13. Clustering is important in data analysis and data mining applications. Clustering helps in understanding the natural grouping in a dataset. It helps to increase productivity, facilitate decision making and generate new business opportunities. It is used to find structure in unlabeled data. It is the most common form of unsupervised learning.
14. Graph based clustering performance can easily be improved by applying ICA blind source separation during the graph Laplacian embedding step. Applying unsupervised feature learning to input data using either RICA or SFT improves clustering performance.