MACHINE LEARNING Worksheet 3

1. d
2. d
3. c
4. b
5. d
6. c
7. d
8. a
9. a
10. b
11. a
12. b
13. 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. They play a wide role in applications like marketing economic research and weblogs to identify similarity measures, Image processing, and spatial research. They are used in outlier detections to detect credit card fraudulence.
14. Clustering performance can easily be improved by applying Independent Component Analysis (ICA), blind source separation (BSS) during the graph Laplacian embedding step. Applying unsupervised feature learning to input data using either reconstruction cost ICA (RICA) or sparse filtering (SFT), improves clustering performance.