Machine Learning
Assignment 3

1) D. All of the above

2) D. None

3) C. Reinforcement learning and Unsupervised learning

4) B. The tree representing how close the data points are to each other

5) D. None

6) C. k-nearest neighbour is same as k-means

7) D. 1, 2 and 3

8) A. 1 only

9) A. 2

10) B

11) A

12) B

13) Clustering is important in data analysis and data mining applications. Clustering separates datasets into many clusters of similar ones and finding out grouping in data automatically. Clustering is the process of grouping data items that are "similar" between them, and "dissimilar" to data items in other clusters so data can be easily understand and analyze.

14) clustering performance can be improved by simply performing K-means clustering on the ICA components after PCA dimension reduction on the input data. PCA dimension reduction method reduces the columns of similar types data taking average of all into single column . Thus reducing large number of columns into desired less no of columns.