# MACHINE LEARNING ASSIGNMENT

1. Movie Recommendation systems are an example of:

**ANS ->** b) 1 and 2

2. Sentiment Analysis is an example of:

**ANS ->** d) 1, 2 and 4

3. Can decision trees be used for performing clustering?

**ANS ->** a) True

4. Which of the following is the most appropriate strategy for data cleaning before performing clustering
   analysis, given less than desirable number of data points:

**ANS ->** d) None of the above

5. What is the minimum no. of variables/ features required to perform clustering?

**ANS ->** b) 1

6. For two runs of K-Mean clustering is it expected to get same clustering results?

**ANS ->** b) No

7. Is it possible that Assignment of observations to clusters does not change between successive
   iterations in K-Means?

**ANS ->** a) Yes

8. Which of the following can act as possible termination conditions in K-Means?

**ANS ->** d) All of the above

9. Which of the following algorithms is most sensitive to outliers?

**ANS ->** a) K-means clustering algorithm

10. How can Clustering (Unsupervised Learning) be used to improve the accuracy of Linear Regression model (Supervised Learning):

**ANS ->** d) All of the above

11. What could be the possible reason(s) for producing two different dendrograms using agglomerative clustering algorithms for the same dataset?

**ANS ->** d) All of the above

12. Is K sensitive to outliers?

**ANS ->** Yes K is sensitive to outliers.

13. Why is K means better?

**ANS ->** It is one of the most robust methods, especially for image segmentation and image annotation projects. According to some users, K-means is very simple and easy to implement.

14. Is K means a deterministic algorithm? 14. Is K means a deterministic algorithm?

**ANS ->** No K means is not a deterministic alogorithm.