MACHINE LEARNING

1.a) 2 Only
2.d) 1, 2 and 4
3.a) True
4.a) 1 only
5.b) 1
6.b) No
7.a) Yes
8.d) All of the above
9.a) K-means clustering algorithm
10.d) All of the above
11.d) All of the above

12.

- Outliners are patterns that are dissimilar with respect to pattern of datasets.
- K- means algorithm finds mean of cluster with respect to nearest centroid.
- Outliners can drag the centroids or form thier own clusters influencing the outcome .
- Therefore, yes, K is sensitive to outliners.

14. K- means is better because:

1. Simplest algorithm
2. Unsupervised learning
3. Guarantee convergence
4. High performance
5. Deals with dataset of all sizes and shapes

15. K-means involves random selection of data points as initial centroids. So, running the algorithm several times on same set of data can give different results each time. Therefore, K-means is not a deterministic algorithm.