MACHINE LEARNING ASSIGNMENT-2

SOLUTION:

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. The answer to the question is yes. K-means can be used as outlier detection. In K-means, using the symmetric distance measure is the key component to define the samples that belonging to the same cluster. Symmetric distance measurement gives similar weight to each dimension (feature) this may not always be the case for defining outliers.
13. K-Means for Clustering is one of the popular algorithms for this approach. Where K means the number of clustering and means implies the statistics mean a problem. It is used to calculate code-vectors (the centroids of different clusters)
14. The non-deterministic nature of K-Means is due to its random selection of data points as initial centroids. ... The key idea of the algorithm is to select data points which belong to dense regions and which are adequately separated in feature space as the initial centroids.