## **MACHINE LEARNING ASSIGNMENT -2**

## **ANSWERS:**

- 1. (a) 2 Only
- 2. (d) 1,2 and 4
- 3. (a) True
- 4. (a) 1 Only
- 5. (b) 1
- 6. (b) No (Will be yes only if random state variable is fixed)
- 7. (a) Yes, when the cluster centres stop moving between successive iterations
- 8. (d) All of the above
- 9. (a) K-means algorithm
- 10. (d) All of the above
- 11. (d) All of the above
- 12. K-means clustering is sensitive to outliers as the means are influenced by extreme values.
- 13. K means is simplest and easiest algorithm to use and one of the least expensive as well, so if k-means is able to provide clusters of reasonable quality it is the best option.
- 14. K-means is a non-deterministic algorithm which is essentially due to randomly chosen data points as centroid every time the algorithm is run, and we could get differing results each time.