

# **MACHINE LEARNING ANSWERSHEET**

## **Answers from 1 to 11**

1. B)
2. D)
3. A)
4. A)
5. B)
6. B)
7. A)
8. D)
9. A)
10. D)
11. D)

## **Answers from 12 to 14**

12. Yes, K is sensitive to outliers. K-means symmetric distance measure is the key component to define the samples that belonging to the same cluster. It gives similar weight to each feature.
13. K means is comparatively easy to implement, can scale large dataset, can warm start the positions of centroids, easily adapts to new examples and generalizes to clusters of different shapes and sizes, such as elliptical clusters.
14. Yes, K-means is a deterministic algorithm. Any algorithm that uses pseudo-random numbers is deterministic given the seed. K-means, that you used as example, starts with randomly chosen cluster centroids so to find optimal ones.