Machine Learning Worksheet-2

Q.1) A

Q.2) D

Q.3) A

Q.4) A

Q.5) B

Q.6) A

Q.7) A

Q.8) D

Q.9) A

Q.10) D

Q.11) D

Q.12) Is K sensitive to outliers?
Answer: Yes K-mean clustering algorithm is sensitive to outliers. Because a mean is easily influenced by extreme values. K-medoids clustering is a variant of K-means that is more robust to noises and outliers.

Q.13)Why is K means better?
Answer: K-means are better because

- It is relatively simple to implement
- Scalers to large datasets
- Guarantees convergence
- Easily adapts to new examples
- Can warm-start the position of centroids

- Generalizes to clusters of different shapes and sizes.

Q.14) Is K mean a deterministic algorithm?

Answer: No. K-mean is a non-deterministic algorithm. It gives different results if we keep running the same algorithm serveral times on the same data.