**MACHINE LEARNING** **ASSIGNMENT-1**

**ANS. NO.1 (A)**

**ANS.NO.2 (D)**

**ANS.NO.3 (A)**

**ANS.NO.4 (A)**

**ANS.NO.5 (B)**

**ANS.NO.6 (B)**

**ANS.NO.7 (A)**

**ANS.NO.8 (D)**

**ANS.NO.9 (A)**

**ANS.NO.10 (D)**

**ANS.NO.11 (D)**

**ANS.NO.12**

The K-mean algorithm is sensitive to the outliers.
K-means clustering is an unsupervised algorithm; it is up to the interpreter to determine whether this makes sense or not for a given data set.

**ANS.NO.13**

K-means clustering is a method of vector quantization, originally from signal processing that aims to partition and observations into k clusters in which each observation belongs to the cluster with the nearest mean serving as a prototype of the cluster.

K-means clustering is one of the simplest and popular unsupervised machine learning algorithms.

Unsupervised algorithms make inferences from datasets using only input vectors without referring to known, or labelled, outcomes.

So thus K- means clustering is better than other clustering.

**ANS.NO.14**

The basic k-means clustering is based on a **non-deterministic algorithm**. This means that running the algorithm several times on the same data, could give different results.