

## MACHINE LEARNING

- 1.clustering(a)
- 2.Regression ,clustering & Reinforcement(1,2&4)(D)
- 3.True(a)
- 4.Capping and flooring of variables(1 only)(a)
- 5.1(b)
- 6.No(b)
- 7.Yes(a)
- 8.All the above(d)
9. K-Means clustering algorithm(a)
- 10.All the above(d)
- 11.All the above(d)
- 12.IS K SENSITIVE TO OUTLIERS?

ANSWER:THE K-means 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 strong to noises and outliers.

### 13.WHY IS K-MEANS BETTER?

ANSWER:K -Means is simplest algorithm to implement and run.It is one of the strongest methods,especially for image segmentation where as other clustering algorithms with better features tend to be more expensive.K-Means is important solution for pre-clustering,reducing the disjoint smaller sub spaces .

### 14.IS K-MEANS A DETERMINISTIC ALGORITHM?

ANSWER:NO ,K-Means is a non-deterministic algorithm this means that running the algorithm several times on same data give different results.However, to ensure consistent results,FCS EXPRESS performs k-means clustering using a deterministic method.