## Assignment-2

# **Machine Learning**

- 1. b) 1 and 2
- 2. b) 1 and 2
- 3. a) True
- 4. a) 1 Only
- 5. b) 1
- 6. b) No
- 7. a) Yes
- 8. d) All of the above
- 9. a) K-means clustering algorithm
- 10. d) All of the above
- 11. d) All of the above

#### 12. Is K-means sensitive to outliers?

Ans:- Yes, K-means is sensitive to outliers as mean distance will change due to outliers.

#### 13. Why is K means better?

Ans:- 1. Relatively simple to implement

- 2. Scales to large data set
- 3. Guarntees convergence
- 4. Easily adapts to new problems
- 5. Generalized to different sizes, Shapes and such as elliptical clusters.

#### 14. Is K means a deterministic algorithm?

**Ans:-** No , In K-means there is a posiibility of different results with different parameters and initial centroid selected randomly.

### **Statistics**

- 1. C)Both
- 2. C) 12
- 3. D) All of the above
- 4. C) Both of these
- 5. D) All of these
- 6. B) Data set
- 7. A) 2 or more
- 8. B) Scatterplot
- 9. D) Analysis of variance
- **10. A) Z-score**
- 11. C) mean
- 12. D) 400005.2
- 13. B) Mode
- 14. A) Descriptive and inferences
- 15. D) H-L