

Worksheet -3

Assignment-3 (Machine Learning)

1. d)

2. d)

3. a)

4. d)

5. d)

6. c)

7. d)

8. d)

9. a)

10. b)

11. a)

12. b)

13. Importance of Clustering: It is the task of grouping a set of objects in some way so that objects in the same group are more similar to each other than to those of other groups.

- Having clustering methods helps in restarting the local search procedure and remove the inefficiency. In addition, clustering helps to determine the internal structure of the data.
- This clustering analysis has been used for model analysis, vector region of attraction.
- Clustering helps in understanding the natural grouping in a dataset. Their purpose is to make sense to partition the data into some group of logical groupings.
- Clustering quality depends on the methods and the identification of hidden patterns.

- They play a wide role in applications like marketing economic research and weblogs to identify similarity measures, Image processing, and spatial research.
- They are used in outlier detections to detect credit card fraudulence.

14. Graph-based clustering performance can easily be improved by applying ICA blind source separation during the graph Laplacian embedding step. Applying unsupervised feature learning to input data using either RICA or SFT.