MACHINE LEARNING

Q.n.1 Which of the following is an application of clustering?

Ans d. All of the above

q.n2 On which data type, we cannot perform cluster analysis?

Ans (b)

q.n.3 Netflix's movie recommendation system uses

Ans (a) a. Supervised learning

Q.n.4 The final output of Hierarchical clustering is

Ans d All of the above

Q. n 5 Which of the step is not required for K-means clustering?

Ans d none

Q. n 6. Which is the following is wrong?

Ans c. k-nearest neighbour is same as k-means

Q. n 7 Which of the following metrics, do we have for finding dissimilarity between two clusters in hierarchical clustering?

Ans (d). 1, 2 and 3

Q. n 8 Which of the following are true?

Ans (a) Clustering analysis is negatively affected by multicollinearity of features

Q. n 9. In the figure above, if you draw a horizontal line on y-axis for y=2. What will be the number of clusters formed?

Ans (a) 2

Q.n 10 . For which of the following tasks might clustering be a suitable approach?

Ans (a

Q.n.11 Given, six points with the following attributes:

Ans (a)

q.n12. Given, six points with the following attributes:

Ans (a)

Q.N 13. What is the importance of clustering?

Ans They can cluster different customer types into one group based on different factors, such as purchasing patterns. The factors analysed through clustering can have a big impact on sales and customer satisfaction, making it **an invaluable tool to boost revenue, cut costs, or sometimes even both**.

Q. N 14 How can I improve my clustering performance?

ANS. 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, improves clustering performance.