```
Ans[1]
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- Ans[2] D) 1, 2 and 4
- Ans[3] D) Formulating the clustering problem
- Ans[4] A) Euclidean distance
- Ans[5] B) Divisive clustering
- Ans[6]- D) All answers are correct
- Ans[7] A) Divide the data points into groups
- Ans[8] B) Unsupervised learning
- Ans[9]-D) All of the above
- Ans[10] A) K-means clustering algorithm
- Ans[11] D) All of the above
- Ans[12] A) Labeled data
- Ans[13] The hierarchical cluster analysis follows three basic steps:
  - 1) calculate the distances,
  - 2) link the clusters, and
  - 3) choose a solution by selecting the right number of clusters.
- Ans[14] To measure the quality of a clustering, we can use the average silhouette coefficient value of all objects in the data set.
- Ans[15]- Cluster analysis is a multivariate data mining technique whose goal is to groups objects (eg., products, respondents, or other entities) based on a set of user selected characteristics or attributes.

  Types of Clustering
  - i) Centroid-based Clustering.
  - ii) Density-based Clustering.
  - iii) Distribution-based Clustering.
  - iv) Hierarchical Clustering.