

1. Cluster Analysis is

10/12 ☒ A Unsupervised learning technique

2/12 ☐ B Supervised learning technique

0/12 ☐ C I do not know

2. Distance between records and distance between clusters are the same

2/12 ☐ A True

10/12 ☒ B False

0/12 ☐ C I do not know

3. Which of these is the measure of between clusters distance?

0/12 ☐ A Single link

0/12 ☐ B Complete link

1/12 ☐ C Average link

2/12 ☐ D Centroid

9/12 ☒ E All of them

0/12 ☐ F I do not know

4. Single link is

11/12 ☒ A the smallest distance between an element in one cluster and an element in the other

0/12 ☐ B the largest distance between an element in one cluster and an element in the other

0/12 ☐ C the average distance between an element in one cluster and an element in the other

1/12 ☐ D distance between the centroids of two clusters

0/12 ☐ E I do not know

5. Complete link is

- 0/12 ☐ A the smallest distance between an element in one cluster and an element in the other
- 10/12 ☒ B the largest distance between an element in one cluster and an element in the other
- 1/12 ☐ C the average distance between an element in one cluster and an element in the other
- 1/12 ☐ D distance between the centroids of two clusters
- 0/12 ☐ E I do not know

6. Which of these is the nested algorithm of clustering?

- 12/12 ☒ A Hierarchical clustering
- 0/12 ☐ B k-means
- 0/12 ☐ C Knn
- 0/12 ☐ D I do not know

7. Which of these is the unnested algorithm of clustering?

- 2/12 ☐ A Hierarchical clustering
- 7/12 ☒ B k-means
- 3/12 ☐ C Knn
- 0/12 ☐ D I do not know

8. Which of these is the type of hierarchical clustering?

- 2/12 ☐ A Agglomerative Methods
- 0/12 ☐ B Divisive Methods
- 10/12 ☒ C Both
- 0/12 ☐ D I do not know

9. This function can be used to perform hierarchical clustering in R

- 9/12 ☒ A hclust()
- 3/12 ☐ B cluster()
- 0/12 ☐ C hierarchical ()
- 0/12 ☐ D I do not know

10. This function can be used to perform k-means clustering in R

11/12 **A** kmeans()

0/12 **B** kclust()

1/12 **C** kmenscl()

0/12 **D** I do not know

11. Do we need to worry about scaling in clustering?

8/12 **A** Yes

4/12 **B** No

0/12 **C** I do not know

12. The goal of Cluster Analysis is

10/12 **A** That the objects within a group be similar (or related) to one another and different from (or unrelated to) the objects in other groups

0/12 **B** That the objects within a group be different from (or unrelated to) to one another and similar (or related) the objects in other groups

1/12 **C** That the objects within a group be similar (or related) to one another and the same for the objects in other groups

1/12 **D** To classify the object as similar as did in the data

0/12 **E** I do no know

13. Cluster Analysis can be considered as

11/12 **A** unsupervised classification

1/12 **B** supervised classification

0/12 **C** supervised regression

0/12 **D** I do not know

14. Exclusive clustering

10/12 **A** Assign each object to a single cluster

1/12 **B** Assign each object to more than one cluster

1/12 **C** Assign each object to cluster with the highest number of data points

0/12 **D** I do not know

15. Partial clustering can be considered if

- 9/12 **A** some objects in a data set may not belong to well-defined groups
- 2/12 **B** assigns every object to a cluster
- 1/12 **C** assigns every object to a cluster with some probability
- 0/12 **D** I do not know