

# DM-Spring-2020-Q8-Grade

60% (9/15)

- ✗ 1. Cluster Analysis is
- ☐ A Unsupervised learning technique
  - ☒ B Supervised learning technique
  - ☐ C I do not know
- ✓ 2. Distance between records and distance between clusters are the same
- ☐ A True
  - ☒ B False
  - ☐ C I do not know
- ✗ 3. Which of these is the measure of between clusters distance?
- ☐ A Single link
  - ☐ B Complete link
  - ☒ C Average link
  - ☐ D Centroid
  - ☐ E All of them
  - ☐ F I do not know
- ✓ 4. Single link is
- ☒ A the smallest distance between an element in one cluster and an element in the other
  - ☐ B the largest distance between an element in one cluster and an element in the other
  - ☐ C the average distance between an element in one cluster and an element in the other
  - ☐ D distance between the centroids of two clusters
  - ☐ E I do not know

- ✓ 5. Complete link is
- ☐ A the smallest distance between an element in one cluster and an element in the other
  - ☒ B the largest distance between an element in one cluster and an element in the other
  - ☐ C the average distance between an element in one cluster and an element in the other
  - ☐ D distance between the centroids of two clusters
  - ☐ E I do not know

- ✓ 6. Which of these is the nested algorithm of clustering?
- ☒ A Hierarchical clustering
  - ☐ B k-means
  - ☐ C Knn
  - ☐ D I do not know

- ✗ 7. Which of these is the unnested algorithm of clustering?
- ☒ A Hierarchical clustering
  - ☐ B k-means
  - ☐ C Knn
  - ☐ D I do not know

- ✓ 8. Which of these is the type of hierarchical clustering?
- ☐ A Agglomerative Methods
  - ☐ B Divisive Methods
  - ☒ C Both
  - ☐ D I do not know

- ✓ 9. This function can be used to perform hierarchical clustering in R
- ☒ A hclust()
  - ☐ B cluster()
  - ☐ C hierarchical ()
  - ☐ D I do not know

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

- ☒ A kmeans()
- ☐ B kclust()
- ☐ C kmenscl()
- ☐ D I do not know

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

- ☐ A Yes
- ☒ B No
- ☐ C I do not know

✓ 12. The goal of Cluster Analysis is

- ☒ 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
- ☐ 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
- ☐ C That the objects within a group be similar (or related) to one another and the same for the objects in other groups
- ☐ D To classify the object as similar as did in the data
- ☐ E I do no know

✗ 13. Cluster Analysis can be considered as

- ☐ A unsupervised classification
- ☒ B supervised classification
- ☐ C supervised regression
- ☐ D I do not know

✗ 14. Exclusive clustering

- ☐ A Assign each object to a single cluster
- ☐ B Assign each object to more than one cluster
- ☒ C Assign each object to cluster with the highest number of data points
- ☐ D I do not know



**15.** Partial clustering can be considered if

- ☒ **A** some objects in a data set may not belong to well-defined groups
- ☐ **B** assigns every object to a cluster
- ☐ **C** assigns every object to a cluster with some probability
- ☐ **D** I do not know