1. What is the difference between supervised and unsupervised learning? Give some examples to illustrate your point.

2. Mention a few unsupervised learning applications.

3. What are the three main types of clustering methods? Briefly describe the characteristics of each.

4. Explain how the k-means algorithm determines the consistency of clustering.

5. With a simple illustration, explain the key difference between the k-means and k-medoids algorithms.

6. What is a dendrogram, and how does it work? Explain how to do it.

7. What exactly is SSE? What role does it play in the k-means algorithm?

8. With a step-by-step algorithm, explain the k-means procedure.

9. In the sense of hierarchical clustering, define the terms single link and complete link.

10. How does the apriori concept aid in the reduction of measurement overhead in a business basket analysis? Give an example to demonstrate your point.