Machine Learning

1. D
2. D
3. D
4. B
5. D
6. C
7. D
8. A
9. A
10. B
11. A
12. B

13. Importance of Clustering - Clustering helps in understanding the natural grouping in a dataset. Their motivation is to check out to parcel the information into some gathering of legitimate groupings. Grouping quality relies upon the strategies and the identification of hidden patterns. The biggest advantage of clustering over-classification is it can adapt to the changes made and helps single out useful features that differentiate different groups. Clustering in machine learning is an essential component and makes life so much easier in creating new machine learning methods. It mainly divides many unstructured data sets into clusters and, according to the common attributes present in them, it helps create more and more clusters. Clustering is important in data analysis and data mining applications. It is the task of grouping a set of objects so that objects in the same group are more similar to each other than to those in other groups (clusters). In machine learning too, we often group examples as a first step to understand a subject (data set) in a machine learning system. Grouping unlabelled examples is called clustering. As the examples are unlabelled, clustering relies on unsupervised machine learning.

14. **Improve Clustering Performance** - The C-H Index is a great way to evaluate the performance of a Clustering algorithm as it does not require information on the ground truth labels. The higher the Index, the better the performance.